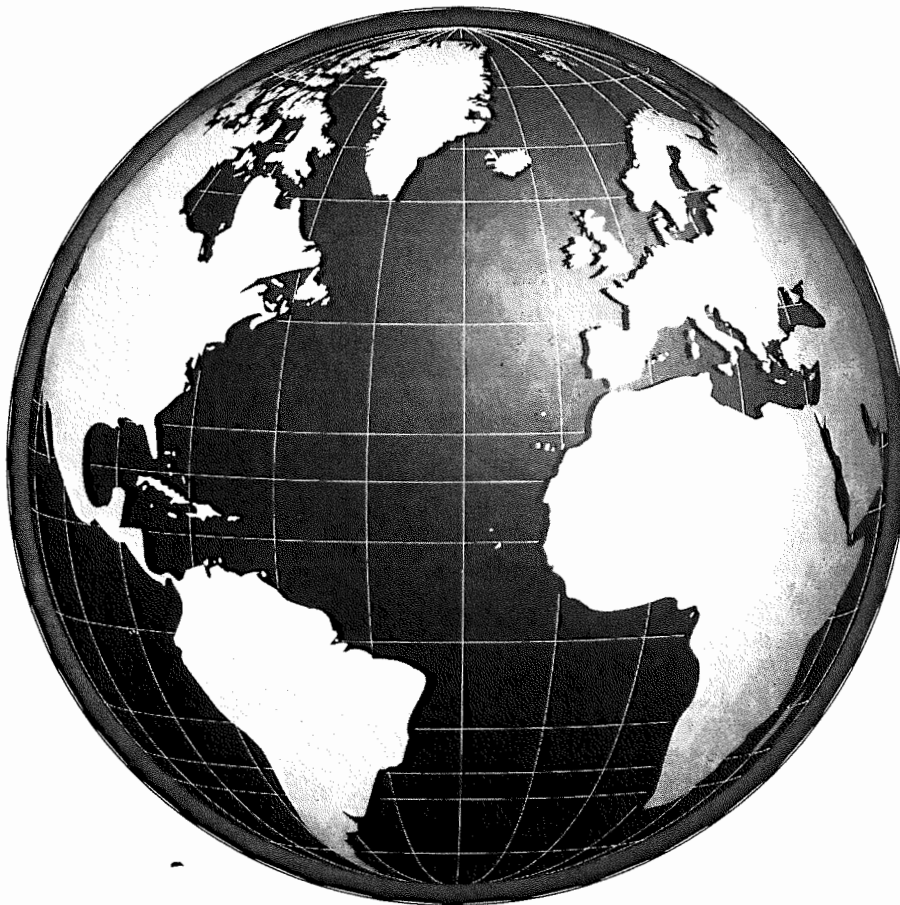


EXHIBIT 6

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dictions, but uncommon. >> civil law 1; Crown Prosecution Service; exclusionary rule; jury; law; police; procurator fiscal; prosecution

crimp The waviness which occurs naturally in wool fibres, imparting a soft bulkiness to yarns. Crimping of synthetic fibres extends their range of uses into knitting and carpet yarns, and the manufacture of softer woven fabrics. >> bulked yarn

crinoid [kriˈnɔɪd] A primitive marine invertebrate (echinoderm), typically attached to the sea bed by a long stalk; occasionally base-attached (*sessile*) or free-swimming; mouth and arms on upper surface; most feed on suspended particles transported to the mouth via food grooves on arms; long fossil record; c.650 living species found from shallow waters to deep sea; also known as **sea lilies** and **feather stars**. (Phylum: Echinodermata. Class: Crinoidea.) >> echinoderm; feather star

Crippen, Hawley Harvey, known as **Dr Crippen** (1862–1910) Murderer, born in Michigan, USA. He studied medicine and dentistry, eventually settling in London, UK (1900) with his second wife, Cora Turner. Having transferred his affections to his secretary, Ethel Le Neve, he poisoned his wife, dissected the body, and interred the remains in the cellar. He and his mistress attempted to escape to Canada on board the SS *Montrose* as Mr and Master Robinson. The suspicious captain contacted Scotland Yard by radiotelegraphy (the first use of radio for a murder case). They were arrested, and Crippen was hanged in London.

Cripps, Sir (Richard) Stafford (1889–1952) British statesman, born in London, UK. He studied at London University, was called to the bar in 1913, and made a fortune in patent and compensation cases. In 1930 he was appointed solicitor general in the second Labour government, and became an MP in 1931. During the 1930s he was associated with several extreme left-wing movements, and was expelled from the Labour Party in 1939 for his 'popular front' opposing Chamberlain's policy of appeasement. He sat as an independent MP during World War 2, was ambassador to the Soviet Union (1940–2), and in 1942 became Lord Privy Seal, and later minister of aircraft production. In the 1945 Labour government, he was readmitted to the Party and appointed President of the Board of Trade. In 1947 he became minister of economic affairs and then Chancellor of the Exchequer, introducing a successful austerity policy. In 1950 he resigned due to illness. >> Chamberlain, Neville; Labour Party (UK); left wing

crisis apparition >> apparition

crisis management A term first employed by Robert McNamara shortly after the 1962 Cuban missile crisis. It implies, given the limited availability of information about other actors, and their unpredictability, that long-term strategic planning cannot provide the basis for action. Crises between states can be resolved only by managing them as they arise. >> Cuban Missile Crisis; McNamara, Robert S

crisis theology A type of Protestant theology initiated after World War 1 under the inspiration of Karl Barth (1886–1968), and very influential during the 1920s and 1930s. The term 'crisis' essentially applied to the judgment (Gr *krisis*) of God upon all merely human social, moral, and religious endeavours. The approach exercised a decisive influence on the Declaration of Barmen (1934) which, in opposition to the readiness of the so-called 'German Christians' to integrate the racist ideology of the German National Socialists into Christian doctrine, affirmed Jesus Christ as God's sole and sufficient revelation and denied any revelations in nature, history, or race apart from him. >> Barth, Karl; Christianity; Christology; revelation

Cristóbal Colón, Pico [peekoh kreestohbal kohlon] Snow-capped Andean peak in N Colombia; rises to 5800 m/19 029 ft, 113 km/70 mi E of Barranquilla; highest peak in Sierra Nevada de Santa Marta and in Colombia. >> Andes

Cristofori, Bartolomeo [kristoforee] (1655–1731) Harpsichord-maker, born in Padua, NE Italy. He is usually credited with the invention of the pianoforte in c.1710. >> harpsichord; piano

criterion-referenced test A test which requires the candidate to meet a set of criteria, as opposed to a **norm-referenced test** which simply ranks students alongside others. Thus a criterion-referenced test in mathematics might list for each grade what a student must do to obtain that grade, eg be able to convert a fraction to a decimal, or multiply two three-digit numbers. >> norm-referenced test; objective test

critical mass The smallest mass of material of a given type and formed into a given shape able to sustain a nuclear-fission chain reaction. For a mass of material greater than the critical mass, large amounts of energy are released via the fission-chain reaction in a small fraction of a second. For a sphere of uranium-235, the critical mass is 52 kg/114.6 lb, corresponding to a radius of 8.7 cm/3.4 in. >> atomic bomb; chain reaction; nuclear fission

critical phenomena The physical properties of systems at their critical points, ie at the temperature where the distinction between two phases vanishes. They are typified by dramatic changes in the parameters used to describe the system; for example, the spontaneous magnetization of iron is reduced to zero when its temperature is raised beyond the critical temperature (the *Curie point*). Critical phenomena are observed in many systems, such as the superfluid, superconducting, ferroelectric, and ferromagnetic transitions. Certain aspects are nevertheless common to all. >> Curie temperature; ferroelectrics; ferromagnetism; phases of matter; superconductivity; superfluidity

critical point (physics) >> critical phenomena

critical theory >> Frankfurt School

Crittenden Compromise (1860) In the months preceding the American Civil War, an attempt by Senator John J Crittenden of Kentucky to resolve the crisis between North and South by formally recognizing slavery in territories S of 36°30'. This proved unacceptable to Abraham Lincoln, whose election as president was causing secession by the slave-holding South. >> American Civil War; slave trade

croaker >> drumfish

Croatia [kroahshay], official name **Republic of Croatia**, Serbo-Croatian **Republika Hrvatska** pop (2000e) 4 681 000; area 56 538 sq km/21 824 sq mi. Republic in the Balkan peninsula of SE Europe; capital, Zagreb; other chief towns, Rijeka, Čakovec, Split, Zadar; timezone GMT +1; major ethnic groups (pre-civil war), Croat (75%), Serb (12%), Slovenes (1%); language, Croatian; religions, Roman Catholic, Eastern Orthodox; currency, the kuna.

Physical description and climate. Fertile Pannonian Plain in C and E; mountainous, barren coastal region near Dinaric Alps; Adriatic coast to W; one third of the country forested; coastal Velebit and Velika Kapela ranges reach heights of 2200 m/7200 ft; islands include Korčula, Lošinj, Dugi Otok, Cres; chief rivers, the Drava, Danube, Sava; continental climate in Pannonian Basin, average temperatures –1°C (Jan), 19°C (Jul); average annual rainfall 750 mm/30 in; Mediterranean climate on Adriatic, average temperatures 6°C (Jan), 24°C (Jul).

History and government. Slavic coast tribes (Chrobati, Hrvati) migrated to White Russia, 6th-c; converted to Christianity, 7th–9th-c; Croat kingdom reached its peak, 11th-c; László I of Hungary claimed Croatian throne, 1091; Turkish defeat of Hungary brought Pannonian Croatia under Ottoman rule, 1526; rest of Croatia elected Ferdinand of Austria as their king, and fought Turkey; joint crownland with Slovenia, 1888; formed Kingdom of Serbs, Croats and Slovenes with Montenegro and Serbia, 1918; became part of Yugoslavia, 1929; proclaimed an independent state during occupation by the Axis Powers, 1941–5; nationalist upsurges against communist rule during 1950s; declaration of independence in 1991, followed by confrontation with the National Army, and civil war; autonomy claim by Serb-dominated Krajina area, 1991; UN peace-keeping forces deployed, 1992, but fighting continued sporadically into 1993; ceasefire followed by peace treaty, 1995; governed by a president, prime minister, and an Assembly, consisting of a 127-member Chamber of Deputies and a 68-member Chamber of Districts.

Economy. Chiefly an agricultural region, with corn, oats, sugar-beet, potatoes, meat and dairy products; tourism on Adriatic coast; electrical engineering, metal-working, machinery, lumber, aluminium, textiles, oil refining, chemicals, rubber; natural resources include bauxite, coal, copper, iron; economy badly affected by the civil war. >> Krajina; Yugoslavia; Yugoslavian Civil War; Zagreb; p.1253 political leaders

Croce, Benedetto [krohchay] (1866–1952) Philosopher, historian, and critic, born in Pescasseroli, EC Italy. He studied at Rome, and in Naples devoted himself at first to



been cut off by the Islamic conquest of Egypt. 'Prester' comes from Old French *prestre*, 'priest'. >> Axum; Buchan, John; Ethiopia; Islam; Nestorians

Preston 53°46'N 2°42'W, pop (2000e) 132 300. County town of Lancashire, NW England, UK; 45 km/28 mi NW of Manchester, on the R Ribble; site of Royalist defeat in the Civil War (1648); 19th-c centre of the cotton industry; birthplace of Richard Arkwright; railway; University of Central Lancashire (1992, formerly Lancashire Polytechnic); electrical goods, engineering, textiles, plastics, chemicals; Harris museum; Preston Guild Fair every 20 years; football league team, Preston North End (Lillywhites). >> Arkwright; English Civil War; Lancashire

Prestonpans [prestonpanz] 55°57'N 3°00'W, pop (2000e) 8080. Town in East Lothian, E Scotland, UK; on S shore of Firth of Forth, 5 km/3 mi NE of Musselburgh; railway; coal processing; site of Scottish victory over the English (1745). >> Scotland; Stuart, Charles

Prestwick 55°30'N 3°12'W, pop (2000e) 13 700. Town in South Ayrshire, SW Scotland, UK; on the W coast, 4.8 km/3 mi N of Ayr; airport (the official international gateway for Scotland); railway; aerospace engineering. >> Scotland

Pretoria [pritawria] 25°45'S 28°12'E, pop (2000e) 613 000 (metropolitan area). Administrative capital of South Africa, and alternative capital of Gauteng province; 48 km/30 mi NE of Johannesburg; altitude 1369 m/4491 ft; founded, 1855; capital of South African Republic, 1881; railway; two universities (1873, 1908); railway engineering, vehicles, iron and steel, chemicals, cement, leather; Voortrekker Memorial, Paul Kruger Memorial, Transvaal Museum. >> Gauteng; Johannesburg; South Africa

Pretorius, Andries (Wilhelmus Jacobus) [pretawrius] (1799–1853) Afrikaner leader, born in Graaff-Reinet, South Africa (then Cape Colony). A prosperous farmer, he joined the Great Trek of 1836 into Natal, where he was chosen commandant-general. He later accepted British rule, but after differences with the governor he trekked again, this time across the Vaal. Eventually the British recognized the Transvaal Republic, later the South African Republic, whose new capital was named Pretoria after him. >> Great Trek; Pretorius, Marthinus

Pretorius, Marthinus (Wessel) [pretawrius] (1819–1901) Afrikaner soldier and statesman, president of the South African Republic (1857–71), born in Graaff-Reinet, South Africa, the son of Andries Pretorius. He succeeded his father as commandant-general in 1853, and was elected president of the South African Republic, and of the Orange Free State (1859–63). He fought against the British again in 1877, until the independence of the Republic was recognized (1881), then retired. >> Boer Wars; Pretorius, Andries

prevalence (of disease) >> **disease frequency**

preventive medicine A branch of medical practice that is concerned with the prevention of disease. This is achieved by measures that (1) control the environment, such as clean air legislation, (2) ensure a clean and suitable food and water supply, (3) promote mass medication (eg schemes of immunization), (4) organize programmes for the eradication of disease (eg smallpox, diphtheria), and (5) promote safer life styles largely by education (eg the reduction in smoking to prevent cancer of the lung, and the promotion of condoms to reduce the possibility of AIDS). >> community medicine; medicine; vaccination

Prévost, Jacques [prayvair] (1900–77) Poet, born in Neuilly-sur-Seine, NC France. He was involved with the Surrealists, and wrote songs, pieces for cabaret, and scenarios for Renoir, as well as the screenplay for the celebrated film, *Les Enfants du Paradis* (1946, *The Children of Paradise*). The piquant mixture of wit and sentiment in his poetry proved very popular; collections include *Paroles* (1946, *Words*), *La Pluie et le beau temps* (1955, *Rain and Fine Weather*), and *Choses et autres* (1972, *Things and Others*). >> French literature; poetry; Renoir, Jean; Surrealism

Previn, André (George) [previn] (1929–) Conductor and composer, born in Berlin, Germany. His family fled from Nazi Germany to the USA in 1938. He studied music mainly in California and Paris, spent some years as a jazz pianist, and became musical director of symphony orchestras at Houston (1967–9), London (1968–79), Pittsburgh (1976–86), and Los Angeles (1986–9). He became composer laureate of the London Symphony Orchestra in 1991, and conductor laureate the following year. He has composed musicals, film scores, and orchestral works, and achieved popular success both on television and in the concert hall by bringing classical music to the attention of a wide public. His books include *Music Face to Face* (1971) and *André Previn's Guide to Music* (1983). He was given an honorary knighthood in 1996.

Prévost, (Antoine François), l'Abbé [prayvoh] (1697–1763) Novelist, born in Hesdin, N France. He spent some years in the army, became a Benedictine monk, then lived in exile in England and Holland. He wrote many novels and translations, but is best known for *Manon Lescaut* (1731), originally published as the final part of a seven-volume novel. Having returned to France by 1735, he was appointed honorary chaplain to the Prince de Conti. >> French literature; novel

Priam [priyam] In Greek legend, the King of Troy. He was son of Laomedon, and husband of Hecuba, and is presented in the *Iliad* as an old man. When Hector was killed, he went secretly to Achilles to beg his son's body for burial. At the sack of Troy, he was killed by Neoptolemus. >> Achilles; Hector; Neoptolemus; Trojan War

Pribilof Islands [pribilof] Group of four islands in the Bering Sea, Alaska, USA; two inhabited (St Paul, St George); area 168 sq km/65 sq mi; centre of seal fur trade. >> Alaska

Price, (Mary Violet) Leontyne (1927–) Soprano, born in Laurel, Mississippi, USA. She studied at the Juilliard School, New York City. A notable Bess (1952–4) in Gershwin's *Porgy and Bess*, she was the first black opera singer on television, in *Tosca* for NBC (1955). An outstanding Verdi singer, she was also much associated with Barber's music. >> Barber

Price, Nick, popular name of **Nicholas Raymond Leige Price** (1957–) Golfer, born in Durban, South Africa. His family moved to Zimbabwe, where he began playing golf as a child. At age 17 he won the Junior World Tournament in San Diego, and turned professional in 1977. Notable wins include the PGA World Series (1983), the United States PGA Championship (1992, 1994), and the British Open (1994). He finished the 1994 PGA tour as top money winner, having earned nearly \$1.5 million.

Price, Vincent (Leonard) (1911–93) Actor and writer, born in St Louis, Missouri, USA. He travelled in Europe, studied at Yale, and became an actor. He made his screen debut in 1938, and after many minor roles he began to perform in low-budget horror movies such as *House of Wax* (1953), achieving his first major success with *The Fall of the House of Usher* (1960). Known for his distinctive, low-pitched, creaky, atmospheric voice, and his quizzical, mock-serious facial expressions, he went on to star in a series of acclaimed Gothic horror movies, such as *The Pit and the Pendulum* (1961) and *The Abominable Dr Phibes* (1971). He abandoned films in the mid-1970s, going on to present cookery programmes for television – he wrote *A Treasury of Great Recipes* (1965) with his second wife, Mary Grant – but he had two last roles in *The Whales of August* (1987) and *Edward Scissorhands* (1991). >> Gothic novel

price index >> **retail price index**

prices and incomes policy An attempt by government to control inflation by acting directly on prices and wages, either by persuasion or by law. This contrasts with the view that inflation should be controlled by monetary or fiscal policies to influence demand, or supply-side measures to improve productivity. The correct structure of prices and wages is controversial, and the government's power to control prices and wages is uneven. Economists tend to agree that prices and wages policy is not a permanent substitute for monetary, fiscal, and supply-side policies, but disagree over how useful incomes policies can be as an occasional supplement to other policies to improve or speed up their working. It is impossible for governments to avoid prices and incomes policy entirely, as they are themselves major purchasers of goods and employers of labour. Efforts at prices and incomes policy have been sporadic, in the UK in the 1960s and 1970s, and in France in the early 1980s. >> inflation; monetarism; stop-go policy; supply-side economics

prickly heat A common generalized skin disorder in tropical countries that may also affect local areas of skin in temperate climates. Obstruction to the ducts of sweat glands results in a crop of small red pimples (*papules*) associated with itching. >> skin; sweat

prickly pear A species of opuntia (*Opuntia vulgaris*) often cultivated for its reddish, juicy, edible fruits. (Family: Cactaceae.) >> opuntia

Pride, Sir Thomas (?–1658) English parliamentarian during the Civil War, born (possibly) near Glastonbury, Somerset, SW England, UK. Little is known of his early life. He commanded a regiment at Naseby (1645), and served in Scotland. When the House of Commons indicated it might effect a settlement with Charles I, he was appointed by the army (1648) to expel its Presbyterian Royalist members (**Pride's Purge**). He sat among the king's judges, and signed the death warrant. He was knighted by Cromwell in 1656. >> Charles I (of England); English Civil War

pride of India A deciduous tree (*Koeleruteria paniculata*) growing to 15 m/50 ft, native to E Asia; leaves pinnate, leaflets toothed; inflorescence pyramidal; flowers 1 cm/0.4 in diameter, yellow, 4-petalled; fruit a papery capsule; also called **golden-rain tree**. It is widely planted for ornament. (Family: Sapindaceae.) >> deciduous plants; inflorescence; pinnate; tree

priest The person authorized to sacrifice. In Christianity, the term derives from the Old Testament sacrificial system, and developed in the New Testament with Jesus Christ as great High Priest. Now, mainly in Roman Catholic, Orthodox, and Anglican usage, it refers to an ordained officer authorized to administer the sacraments, in particular the Eucharist (the sacrifice of the Mass). >> Eucharist; Jesus Christ; Mass; Old Testament; Orders, Holy; sacrament

Priestley, J(ohn) B(oynton) (1894–1984) Writer, born in Bradford, West Yorkshire, N England, UK. He studied at Bradford and Cambridge, made a reputation with his critical writings, and gained wide popularity from his novel, *The Good Companions* (1929). It was followed by other humorous novels, such as *Angel Pavement* (1930), and he established his reputation as a playwright with *Dangerous Corner* (1932), *Time and the Conways* (1937), and other plays on space-time themes, as well as popular comedies, such as *Laburnum Grove* (1933). He married the archaeologist Jacquetta Hawkes in 1953. He refused both a knighthood and a peerage, but accepted the Order of Merit in 1977. >> drama; English literature; novel

Priestley, Joseph (1733–1804) Chemist and clergyman, born in Fieldhead, West Yorkshire, N England, UK. In 1755 he became a Presbyterian minister, and after moving to Leeds in 1767 took up the study of chemistry. He is best known for his research into the chemistry of gases, and for his discovery of oxygen (1774). He also wrote an English grammar and books on education and politics. His controversial views on religion and political theory (he was a supporter of the French Revolution) led him in 1794 to leave in fear of his life for America, where he was well received. >> oxygen

primary In politics, an election to choose the candidates for an election to public office. It differs from other forms of candidate selection in that the primary election is not organized by political parties, but by the government authority for which the election is to be held. The procedure is most commonly associated with the USA, but there are various forms of primary, and several ways in which political parties can be directly or indirectly involved. >> political science

primary colours There are three primary colours recognized in physiology and physics: red, green, and blue. The primary pigments of painting and colour printing

THE CHAMBERS ENCYCLOPEDIA

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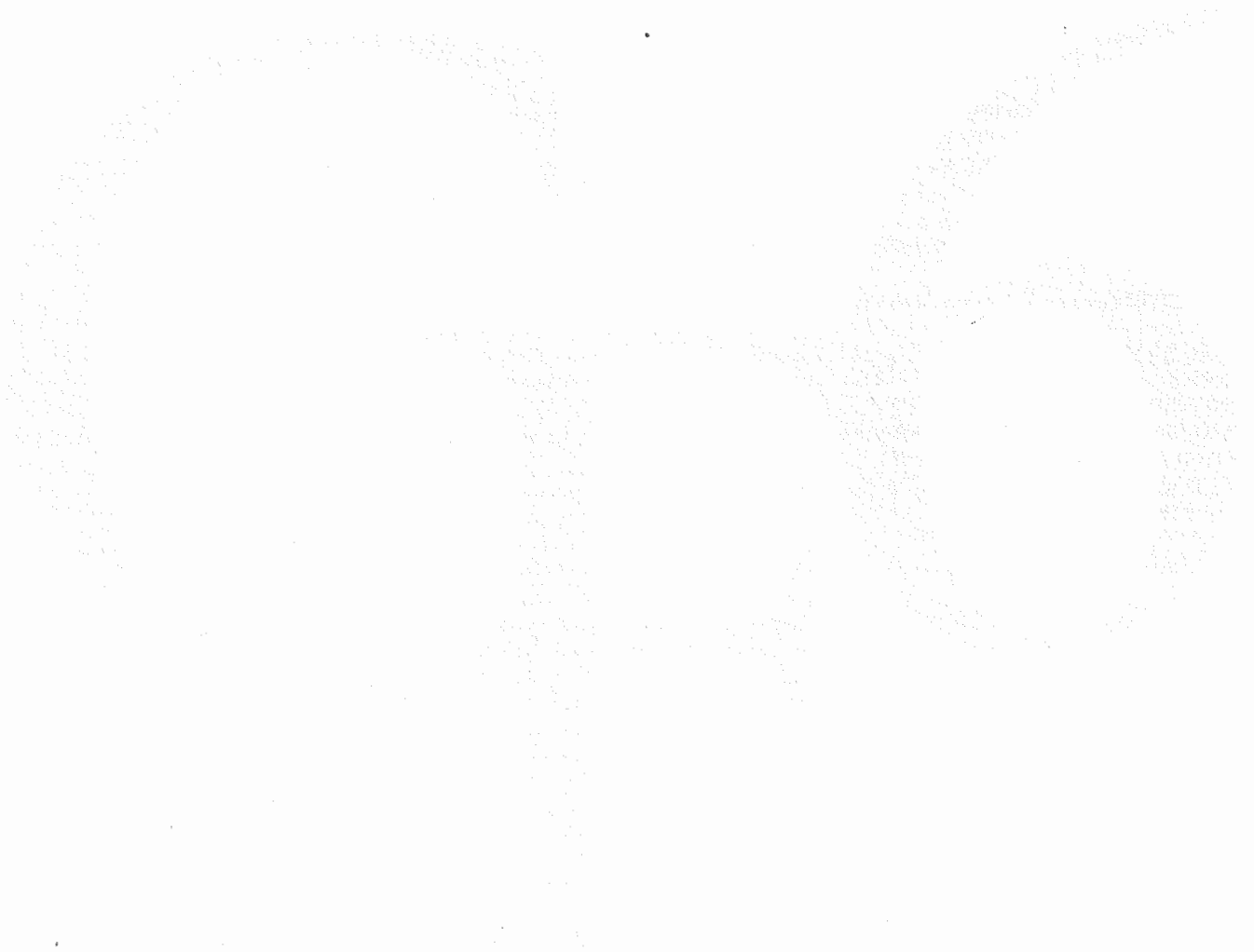


- fusilli** pasta shaped into short thick spirals. [Italian]
- galantine** a dish of boneless cooked white meat or fish served cold in jelly. [Old French]
- garam masala** a mixture of ground spices used to make curry. [Hindi, = hot mixture]
- garni** trimmed, garnished. [French; from *garnir*, to garnish]
- gâteau** or **gâteau** (*plural* **gâteaux**, **gateaus**, **gâteaux**) a large rich cake, especially filled with cream and decorated with fruit, nuts, etc. [French]
- ghee** butter made from cow's or buffalo's milk, purified by heating, used in Indian cooking. [from Hindi *ghi*]
- glacé** *adjective* **1** coated with a sugary glaze; candied: eg glacé cherries. **2** said of icing on cakes etc, made with icing sugar and liquid. **3** said of drinks etc, frozen or served with ice, eg mousse glacée; *verb* (**glacéed**, **glacéing**) **1** to crystallize fruit etc. **2** to ice cakes etc with glacé icing. [French]
- gnocchi** an Italian dish of small dumplings made with flour, cooked potato, or semolina, poached and served with various sauces. [Italian, = lumps]
- gougère** a kind of choux pastry that has grated cheese added to it before baking. [French]
- goujons** small strips of fish or chicken coated in seasoned flour, egg and breadcrumbs, and deep-fried. [from French *goujon*, gudgeon (the fish)]
- gratin** the golden brown crust covering a gratinated food or dish; ► **au gratin**.
- gratinate** to cook with a topping of buttered breadcrumbs and/or cheese browned until crisp; to cook au gratin; ► **au gratin**. [from French *gratiner*, to cook au gratin]
- gratiné** cooked or served au gratin; ► **au gratin**. [from French *gratiner*, to cook au gratin]
- gremolata** a colourful, flavoursome garnish, made of chopped parsley, lemon or orange peel, garlic, etc. [Italian]
- haute cuisine** cookery (especially French) of a very high standard. [French, = high cooking]
- hors d'oeuvre** a savoury appetiser served at the beginning of a meal. [French, = out of the work]
- hummus** or **hoummos** or **houmus** a Middle Eastern hors d'oeuvre or dip consisting of pureed cooked chickpeas and tahini paste, flavoured with lemon juice and garlic. [from Turkish *humus*]
- jardinière** an accompaniment of mixed vegetables for a meat dish. [from French *jardinière*, feminine of *jardinier*, gardener]
- jus** juice; gravy. [French]
- kofta** (*plural* **koftas**) (Indian cookery) minced and seasoned meat or vegetables, shaped into balls and fried. [Hindi, = pounded meat]
- lasagne** pasta in the form of thin flat sheets, often cooked in layers with a mixture of meat and tomatoes, and a cheese sauce. [Italian]
- lyonnaise** made with sautéed sliced potatoes and onions or potatoes in an onion sauce. [named after Lyon, France]
- macaroni** (*plural* **macaronis**, **macaronies**) pasta in the form of short tubes. [from Italian *macaroni*]
- mascarpone** a soft Italian cream cheese. [Italian]
- mayonnaise** a cold creamy sauce made of egg yolk, oil, vinegar or lemon juice, and seasoning. [French]
- meringue** a crisp cooked mixture of sugar and egg whites, or a cake made from this. [French]
- mesclun** a mixed green salad of young leaves and shoots of rocket, chicory, fennel, etc. [French; from Niçois *mesclumo*, mixture]
- minestrone** thick soup containing vegetables and pasta. [Italian; from *minestrare*, to serve]
- moussaka** a dish made with minced meat, aubergines, onions, tomatoes, etc, covered with a cheese sauce and baked, traditionally eaten in Greece, Turkey and the Balkans. [Greek]
- mousse** **1** a dessert made from a whipped mixture of cream, eggs and flavouring, eaten cold. **2** a similar meat or fish dish. [French, = froth]
- mozzarella** a soft white Italian cheese, especially used as a topping for pizza. [Italian]
- muesli** a mixture of crushed grain, nuts and dried fruit, eaten with milk, especially for breakfast. [Swiss German]
- mulligatawny** a thick curry-flavoured meat soup, originally made in E India. [from Tamil *milagu-tannir*, pepper-water]
- nan** a slightly leavened Indian bread, similar to pitta bread. [Hindi]
- navarin** a stew of lamb or mutton with root vegetables such as turnip. [French]
- nougat** a chewy sweet containing nuts, etc. [French; from Latin *nux*, nut]
- nouvelle cuisine** a simple style of cookery characterized by much use of fresh produce and elegant presentation. [French, = new cookery]
- omelette** (*especially* **USA omelet**) a dish of beaten eggs fried in a pan, often folded round a savoury or sweet filling such as cheese or jam. [from Old French *alemette*; from *lemelle*, knife-blade]
- paella** a Spanish dish of rice, fish, or chicken, vegetables and saffron. [Catalan; from Latin *patella*, pan]
- pakora** an Indian dish of chopped spiced vegetables formed into balls, coated in batter, and deep-fried. [Hindi]
- papillote** **1** frilled paper used to decorate the bones of chops, etc. **2** oiled or greased paper in which meat is cooked and served. [French, apparently from *papillon*, butterfly]
- Parmesan** a hard dry Italian cheese, especially served grated with pasta dishes. [from Italian *Parmegiano*, from Parma]
- passata** an Italian sauce of puréed and sieved tomatoes. [Italian, = passed (ie through a sieve)]
- pasta** **1** a dough made with flour, water, and eggs shaped in a variety of forms such as spaghetti, macaroni, lasagne, etc. **2** a cooked dish of this, usually with a sauce. [Italian; from Latin *pasta*, paste, dough; from Greek *pasta*, barley porridge]
- pâté** a spread made from ground or chopped meat, fish or vegetables blended with herbs, spices, etc. [French; formerly meaning pie or pasty]
- pâtisserie** a shop selling fancy cakes, sweet pastries, etc. [from French *pâtisserie*; from Latin *pasta*, dough]
- pesto** an Italian sauce originating in Liguria and made from fresh basil leaves, pine kernels, olive oil, garlic and Parmesan cheese. [Italian; from *pestare*, to crush, pound]
- petit four** (*plural* **petits fours**) a small sweet biscuit, usually decorated with icing. [French, = little oven]
- pilaf** or **pilaff** or **pilau** an oriental dish of spiced rice with chicken, fish, etc. [from Turkish *pilaw*]
- pizza** a circle of dough spread with cheese, tomatoes, etc and baked, made originally in Italy. [Italian]
- polenta** an Italian dish of cooked ground maize. [Italian; from Latin *polenta*, hulled and crushed grain]
- poppadum** or **poppadom** a paper-thin pancake grilled till crisp for serving with Indian dishes. [Tamil]
- praline** a sweet consisting of nuts in caramelized sugar. [named after Marshal Duplessis-Praslin (1598–1675), a French soldier whose cook invented it]
- pretzel** a salted and glazed biscuit in the shape of a knot. [German]
- profiterole** a small sweet or savoury confection of choux pastry. [French; said to be a diminutive from *profiter*, to profit]
- prosciutto** finely cured uncooked ham, often smoked. [Italian = provençale a style of olive oil, tomatoes, eggs à la provençale slow-cooking. [near SE France]
- pumpernickel** a dark especially in Germanically 'stink-devil' or
- purée** *noun* a quantity to a pulp by liquid *verb* (**purées**, **puréi** French *purier*, to strain)
- puri** a small cake of fried and served hot
- quesnelle** a dumpling
- quesadilla** (Mexican cheese, chillis, etc, ican Spanish; diminutive)
- quiche** a tart with a savoury filling of eggs. [French; from
- ragout** a highly seasoned savoury dish. [from French]
- ramekin** **1** a small baked food. **2** an individual savoury dish contained in a ramekin. [from French]
- ratafia** **1** a flavouring of almonds. **2** a fruit kernels and alcohol biscuit or small cake or *ratia*, a type of rum
- ratatouille** a southern French stew of vegetables, peppers, courgettes, garlic. [French]
- ravioli** *plural noun* small dumplings with a savoury filling of meat or cheese
- risotto** (*plural* **risottos**) a rice dish cooked in a meat or seafood stock with cheese, etc. [from Italian]
- roti** (*plural* **rotis**) **1** a flatbread, traditionally made in parathas, a kind of sandwich made of fried vegetables, served with chutney
- roulade** meat, cake or fruit, usually with a filling, rolled up
- roux** (*plural* **roux**) a mixture of fat and flour used to thicken sauces, soups, etc. [from French]
- rugelach** or **rugelach** small crescent-shaped pastries with fruit, cheese, etc. [from Yiddish]
- salami** (*plural* **salamis**) a cured meat, usually served sliced
- salsa** (Mexican cooking) a mixture of tomatoes, onions, chilli, etc. [from Spanish *salsa*, sauce]
- salsa verde** Italian green sauce, usually with garlic, capers, etc. [from Italian *salsa*, sauce]
- samosa** a small deep-fried vegetable pasty of Indian origin
- sauerkraut** shredded cabbage, popular in German cuisine
- sauté** *verb* (**sautés**, **sautéing**) to fry gently in a little fat, usually in this way: eg sautéed potatoes
- sauter**, to jump]
- schnapps** in N Europe especially Dutch gin

The Columbia Encyclopedia

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Edited by Paul Lagassé



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white-collar criminals as by other criminals outside organized crime.

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Crinoidea: see ECHINODERMATA; SEA LILY.

Cripple Creek, very small city, alt. 9,375 ft (2,858 m), seat of Teller co., central Colo.; inc. 1892. Primarily a summer resort, it was once a great gold-mining town. The discovery of gold (1891) on a cattle ranch created one of the richest camps of a major gold-producing area, with an exciting town life. In 1901 the district had an estimated population of 50,000. Gold production declined after that year, yet the opening of a drainage tunnel in 1941 reactivated formerly flooded mines and led to the discovery of new veins. Violence marked miners' strikes in 1893 and 1904. The old mines are tourist attractions.

Cripps, Sir Stafford, 1889–1952, British statesman. A brilliant and successful patent and corporation lawyer, he joined the Labour party in 1929 and became solicitor general in 1930, being knighted the same year. He resigned on the formation (1931) of the National government but won a seat in Parliament. He became a leading spokesman of the left wing of the Labour party and in 1939 was expelled from the party for urging a united front with the Communists. Sir Winston Churchill appointed (1940) him ambassador to the Soviet Union and, on Cripps's return to England in 1942, made him lord privy seal and leader of the House of Commons. In the same year Cripps was sent to India with a self-government plan (which was rejected by India). Shortly thereafter he became minister of aircraft production. In 1945, Cripps was readmitted to the Labour party and appointed president of the Board of Trade in the new Labour government. He returned to India to negotiate independence in 1946, and the failure of his mission (because of the antagonism between Hindus and Muslims) is often seen as the point at which the partition of India became inevitable. In 1947, Cripps was appointed to the newly created office of minister of economic affairs and within the same year became, in addition, chancellor of the exchequer. Great Britain was in the throes of a severe economic crisis, which Cripps sought to counter with his policy of austerity. By continuing rationing and imposing strict economic controls, he was able to slow inflation while maintaining full employment and without cutting back the government's welfare programs. Despite a vigorous export drive, however, Britain's balance of payments situation remained serious, and in 1949, Cripps most reluctantly devalued the pound by 30%. He retired in 1950. See study by R. Moore (1979).

Cris: see KÖRÖS, river, Romania.

Crișana-Maramureș (krishā'nā-māramōō'rish), historic province, NW Romania, between Transylvania and Hungary. It covers approximately the present-day regions of Crișana (4,725 sq mi/12,238 sq km) and of Maramureș (4,053 sq mi/10,497 sq km). ARAD, ORADEA, and SATU-MARE are the chief cities. The region occupies the easternmost part of the Hungarian plain and the western foothills of the Transylvanian Alps. It is largely agricultural. Crișana-Maramureș was part of Hungary until 1919 and retains a sizable Hungarian minority.

crisis, economic: see DEPRESSION.

Crispi, Francesco (frānchās'kō krēs'pē), 1819–1901, Italian premier (1887–91, 1893–96), b. Sicily. After participation in the Sicilian revolt of 1848 against the repressive rule of Ferdinand II of Sicily, he went into exile to Piedmont, then to Malta and England, where he met Mazzini, and to France. He returned to Italy and joined GARIBOLDI in his expedition to Sicily, which resulted in the proclamation of the kingdom of Italy (1861). A deputy to the Italian parliament from 1861, he was at first a republican, but later became an outspoken monarchist. In a letter to Mazzini he declared, "The monarchy unites us; the republic would divide us." He became minister of the interior (1877–78) in the Depretis cabinet. A charge of bigamy hindered his political career for the next nine years, but he returned to the Depretis cabinet in 1887 and became premier upon Depretis's death. He strengthened Italy's commitment to the Triple Alliance with Germany and Austria-Hungary, but thereby helped cause Italian relations with France to deteriorate still further, leading to a tariff war between the two countries from 1888 to 1892. He also pressed a forward policy in NE Africa and organized the colony

of Eritrea. He was overthrown in 1891 by the Giolitti, but returned to power in 1893 when bank scandals and the labor crisis in Sicily led to demands that a strong person assume office. He was reelected by a huge majority in 1895. However, resentment over his reactionary policies and, above all, the terrible defeat that Italian forces seeking to expand into Ethiopia suffered at Adwa (1896) soon forced him from office. Colorful, controversial, and intensely patriotic, his attacks on Italian liberalism have led him to be seen by some as a precursor to MUSSOLINI.

Crispus (kris'pəs), in the New Testament, prominent Corinthian Jew converted by St. Paul.

Cristóbal (krēstō'bāl), town, Colón prov., near the Caribbean end of the Panama Canal, Panama. Cristóbal is located in the former Panama Canal Zone and was the American residential suburb of Colón; it has been under Panamanian jurisdiction since 1979.

Cristus, Petrus: see CHRISTUS, PETRUS.

Critias (krish'eās, krītēās), c.460–403 B.C., Athenian political leader and writer. A relative of Plato, he was an aristocrat and had early training in philosophy with Socrates and wrote poems and tragedies. He is best remembered, however, as one of the Thirty Tyrants imposed on Athens by the Spartans. He was soon at odds with Theramenes, who was put to death. Critias earned a name for rapacity and bloodthirstiness, although Plato seems to have admired him, using him as a speaker in the dialogues *Protagoras*, *Timaeus*, and *Critias*. When THRASYBULUS led his forces against the Thirty, Critias was killed in battle.

critical angle: see REFRACTION.

critical mass: see CHAIN REACTION.

criticism, the interpretation and evaluation of literature and the arts. It exists in a variety of literary forms: dialogues (Plato, John Dryden), verse (Horace, Alexander Pope), letters (John Keats), essays (Matthew Arnold, W. H. Auden), and treatises (Philip Sydney, Percy Bysshe Shelley). There are several categories of criticism: theoretical, practical, textual, judicial, biographical, and impressionistic. However, as the American critic M. H. Abrams has pointed out in *The Mirror and the Lamp* (1953), all criticism, no matter what its form, type, or provenance, emphasizes one of four relationships: the mimetic, the work's connection to reality; the pragmatic, its effect on the audience; the expressive, its connection to the author; and the objective, the work as an independent, self-sufficient creation.

From its beginning criticism has concerned philosophers. Plato raised the question of the authenticity of poetic knowledge in the *Ion*, in which both poet and performer are forced to admit ignorance about the source of their inspiration and the function of their craft. In his *Poetics*, Aristotle focused on tragic drama to discover its effect—the purgation of the audience's emotions (see TRAGEDY). Roman civilization produced two critics who were poets rather than philosophers. Horace declared in the *Ars Poetica* (c.13 B.C.) that poetry must be "dulce et utile"—"sweet and useful." In his *On the Sublime* (1st cent. A.D.) the Greek Longinus presented the view that poetry must be the divinely inspired utterance of the poet's impassioned soul. Interestingly, each of these pronouncements was an accurate description of the author's own work rather than a set of rules for all poetry. Thus, the ancients can be credited with delineating the two major types of criticism: theoretical, which attempts to state general principles about the value of art (Plato, Aristotle), and practical, which examines particular works, genres, or writers in light of theoretical criteria (Horace, Longinus).

Textual criticism, the comparison of different texts and versions of particular works with the aim of arriving at an incontestable "master version," has been perhaps most familiar over the centuries in biblical criticism. Textual critics of note include St. Augustine and St. Jerome (the Bible), and later, Samuel Johnson and H. H. Furness (Shakespeare).

Renaissance critics ignored their recent heritage—the medieval attitude toward art as a form of prayer—and looked to the classics. Aristotle's works in particular, for usable models. Philip Sydney maintained in his *Defense of Poetry* (1595) that poetry must engage and uplift the emotions of its audience with "heart ravishing knowledge." In his *Poetics* (1561) the Italian critic Julius Caesar Scaliger transformed Aristotle's description of the dramatic unities of time, setting, and plot into exigencies, which were strictly adhered to by the neoclassical dramatists of 17th-century France and England. In his *Essay on Criticism* (1711) Alexander Pope added an important section on the criticism of critics: those who do their job best always "survey the Whole, not seek slight faults to find." Because the general tone of criticism of this period was prescriptive, it is called judicial criticism.

Samuel Johnson's *Lives of the Poets* (1779–81) was the first thorough-going exercise in biographical criticism, the attempt to relate a writer's background and life to his works. The revolution from neoclassicism to romanticism is seen in the works of William Wordsworth and Samuel Taylor Coleridge, who emphasized the importance of emotion and imagination in literature. In his Preface to the Second Edition of the *Lyrical Ballads* (1800), Wordsworth described the lyric as "emotion recollected in tranquillity," and Coleridge, in his *Biographia Literaria* (1817), defined imagination as "the repetition in the finite mind of the eternal act of creation," rather than as a mere mechanical flight of fancy. The radical shift in emphasis was further delineated by John Keats in his letters and by Percy Bysshe Shelley in his *Defense of Poetry* (1821)—"poets are the unacknowledged legislators of the world." Some critics celebrated art for art's sake, with no moral strings attached, such as Arthur Symonds in *The Symbolist Movement in Literature* (1899). Henry James, an important novelist and critic of the novel, stressed the possibilities of point of view for further developing the narrative form in his essay "The Art of Fiction" (1893). The emphasis in criticism of this period on the reaction of the critic to the work under scrutiny led to the use of the term impressionistic criticism.

The 20th cent. has been called the Age of Criticism. Such major disciplines as psychology and anthropology, and such ideologies as Christian theology and Marxist dialectic, were found to have valid application to works of literature. Freudian analysis became a tool for literary biographers. Carl Jung's theory of the collective unconscious also became a tool, along with anthropological methodology, for critics like T. S. Eliot (in *The Sacred Wood*, 1920) and Northrop Frye (in *Anatomy of Criticism*, 1957), who sought to trace similarities of pattern in literatures of disparate cultures and ages. By means of the so-called New Criticism—the technique of close reading, which largely ignores biographical and historical concerns—such critics as Cleanth Brooks, Allen Tate, and Lionel Trilling revived the notion of a poem as an autonomous art object. Notable among academic and journalistic critics who used a combination of critical approaches to enlighten their readers are Edmund Wilson (in such works as *The Triple Thinkers*, 1938), W. H. Auden (in *The Dyer's Hand*, 1962), and George Steiner (in *Language and Silence*, 1970). Feminist and multicultural literary criticism also were important forces throughout the second half of the 20th cent. Structuralism in its literary critical form was a dominant theory from the 1960s into the 1970s, largely due to the work of French theorists Roland Barthes and Michel Foucault. During the 1980s and into the 1990s DECONSTRUCTION, influenced by such figures as Jacques Derrida and Paul de Man, dominated academic criticism. In addition, the historical approach of such New Historicists as Stephen Greenblatt also found a number of adherents. In general, a critical eclecticism characterized literary criticism at the end of the 20th cent.

There have been a variety of critical trends in music and art criticism also. The approach has ranged from practical to theoretical, from G. B. Shaw's music reviews in the London press of the 1880s to treatises like Alfred Einstein's *Mozart* (1945) and Charles Rosen's *Classical Style* (1971). From the 1960s to the end of the 20th cent. new genres of music criticism emerged that took for their subject jazz, rock, ethnic, and other specialized forms of music. The spectrum of art criticism includes such works as Robin George Collingwood's *Principles of Art* (1938), André Malraux's *Voices of Silence* (1952), the writings of Harold Rosenberg and Clement Greenberg, and the more recent criticism of such figures as Michael Freed, Barbara Rose, and Adam Gopnik. Newer areas for critical scrutiny include film, architecture, and urban planning. Notable film critics include James Agee, Andre Bazin, Pauline Kael, and Janet Maslin. Architectural criticism by Ada Louise Huxtable and others and studies of the city by Lewis Mumford and Jane Jacobs broke new ground for critical scrutiny.

See G. Saintsbury, *A History of Criticism* (3 vol., 1961); R. Wellek, *A History of Modern Criticism* (4 vol., 1955–65); W. C. Greene, *The Choices of Criticism* (1965); P. Barry, *Issues in Contemporary Literary Theory* (1987); B. Bergonzi, *Exploding English* (1990).

Critius (krish'ās), or **Kritios** (krīt'ēōs), and **Nesiotēs** (nēshēō'tēz), fl. 5th cent. B.C., Greek sculptors, in the time of the Persian Wars. They made statues of the Tyrannicides, Harmodius and Aristogiton, who slew the tyrant Hipparchus. The works replaced a group by Antenor taken from Athens by Xerxes and later returned. The originals have disappeared, but a number of Roman reproductions survive. The most complete marble copies are those in the national museum at

Cross references are indicated by SMALL CAPITALS

gauge acts automatically to stop further operation when the pressure has reached a certain point and to start it up again when compression has fallen off to a certain limit.

In general, a gauge consists of a metal tube or diaphragm that becomes distorted when pressure is applied and, by an arrangement of multiplying levers and gears, causes an indicator to register the pressure upon a graduated dial. The Bourdon gauge used to measure steam pressure and vacuum consists essentially of a hollow metal tube closed at one end and bent into a curve, generally elliptic in section. The open end is connected to the boiler. As the pressure inside the tube (from the boiler) increases, the tube tends to straighten out. The closed end is attached to an indicating needle, which registers the extent to which the tube straightens out. For pressure too small to be accurately measured by the Bourdon gauge, the manometer is used. The simplest type of manometer consists of a U tube partially filled with a liquid (i.e., mercury), leaving one end open to the atmosphere and the other end to the source of pressure. If the pressure being measured is greater or less than atmospheric pressure, the liquid in the tube moves accordingly. Pressures up to several million lb per sq in. have been produced in experiments to determine the effect of high pressure on various substances.

pressure group, body, organized or unorganized, that actively seeks to promote its particular interests within a society by exerting pressure on public officials and agencies. Pressure groups direct their efforts toward influencing legislative and executive branches of government, political parties, and sometimes general public opinion. A major area of concentration for pressure groups in the United States is the Congress, which may draw up legislation affecting the interests of the group (see LOBBYING). Through promises of financial support or of votes by interest group members at the next election, the organization hopes to persuade certain legislators, especially appropriate committee chairmen, to endorse favorable legislation. This is one of the reasons that incumbents, regardless of party, receive the preponderance of campaign funds. Much effort is also expended in influencing executive decisions, because the bureaucracy often possesses considerable discretion in implementing legislation. This is especially true of the independent regulatory agencies (e.g., the Federal Communications Commission and the Securities and Exchange Commission). Such agencies are especially open to the influence of those they regulate because of their continuing relationship with those they oversee; they receive much more sporadic attention from possible countervailing forces such as Congress or public opinion. Political parties are also targets for pressure groups. However, because influencing public policy rather than electing a certain candidate is the aim of an interest group, most groups avoid heavy involvement with one party and generally remain at least formally nonpartisan. Some large pressure groups make a considerable effort to mold public opinion by means of mailing campaigns, advertising, and use of the communications media. On the other hand, there are other groups, especially the more powerful organizations representing narrow interests, that prefer to have their activities and influence go unnoticed by the public at large. Because any particular pressure group reflects the interests of only a part of the population, it is argued that such organizations are contrary to the interests of the general public. However, it is pointed out that some interest groups supply legislators with much needed information, while others, such as the labor unions, perform a broad representative function. The power of an interest group is usually dependent on the size of its membership, the socioeconomic status of its members, and its financial resources. There are a great many categories of interest groups, including economic, patriotic, racial, women's, occupational, and professional groups. The American Association of Retired Persons, the American Farm Bureau Federation, the American Legion, the National Association of Manufacturers, and the National Organization for the Reform of Marijuana Laws are examples of well-known pressure groups. See V. O. Key, *Politics, Parties, and Pressure Groups* (5th ed. 1964); G. McConnell, *Private Power and American Democracy* (1967); M. Lipsky, *Protest in City Politics* (1969); D. Truman, *Governmental Process* (2d ed. 1971); S. Miller, *Special Interest Groups in American Politics* (1983); J. D. Greenstone, ed., *Public Values and Private Power in American Politics* (1984).

Presteigne (prĕstēn'), town (1991 est. pop. 1,780), Powys, E Wales, on the Lugg River where it forms the border with England. Presteigne has an agricultural market, timber yards, an iron foundry, and die-casting works. Tourism is also popular.

Prester John, legendary Christian priest and monarch of a vast, wealthy empire in Asia or in Africa. The legend first appeared in the latter part of the 12th cent. and persisted for several centuries. At first the utopian realm of this Christian king was supposed to be in Asia, but later it was more generally placed in Africa. Letters supposed to have been written by him and about him were widely circulated in Western Europe. See studies by V. Slessarev (1959) and R. Silverberg (1972).

Preston, city (1991 pop. 166,675) and district, Lancashire, N England, on the Ribble River. Preston has an active port and is a center of cotton and rayon manufacturing. Some mills have closed, but work has been created in the areas of engineering, as well as aircraft, motor vehicle, industrial machinery, and electrical appliance production. A guild-merchant festival has been held in Preston every 20 years for more than four centuries. One of the oldest administrative regions in England, Preston has sent representatives to Parliament since the 13th cent. It was the scene of a victory by Oliver Cromwell in 1648 and of the surrender of the Jacobites after the rising of 1715. The Gothic town hall was completed in 1867 from designs by George Gilbert Scott. The Harris Museum and Art Gallery is a notable attraction. The city is the birthplace of Richard Arkwright and Francis Thompson.

Prestwich, town (1991 pop. 31,854), Greater Manchester, N England. It is a residential suburb of Manchester that largely manufactures cotton and rayon.

Prestwick, town (1991 pop. 13,355), Strathclyde region, SW Scotland, on the Firth of Clyde. Prestwick is a seaside and golfing resort with an international airport. Light aircraft are manufactured in Prestwick.

Preti, Mattia (măt-tē' à prĕ-tē), 1613–99, Italian baroque painter, called Il Calabrese for his birthplace. Preti went to Rome c.1630 and studied with Lanfranco. His most dramatic works were the Caravaggesque paintings of his period in Naples (1656–60). His frescoes in the Valmontone Palace in Rome (1661) show a change to the late-baroque manner in the flickering, restless treatment of the figures. After 1661, Preti settled in Malta, where he decorated the vault of San Giovanni in Valletta.

pretor: see PRAETOR.

Pretoria (prĕtō'ri-ə), city (1991 pop. 667,700), Gauteng, administrative capital of SOUTH AFRICA and formerly capital of TRANSVAAL. Although it is primarily an administrative center, there are important industries, especially iron and steel. The city has automobile assembly plants, railroad and machine shops, and flour mills. Pretoria is linked with the rest of South Africa by highways and railroads; an international airport is nearby. Founded in 1855, the city was named for Andries Pretorius, a BOER (Afrikaner) leader. Pretoria became the capital of the South African Republic (the Transvaal) in 1860. During the SOUTH AFRICAN WAR (1899–1902), Winston Churchill was imprisoned in Pretoria but escaped to Mozambique. The Peace of Vereeniging, which ended the war, was signed in Pretoria. When the Union of South Africa was founded in 1910, Pretoria became its administrative capital and CAPE TOWN its parliamentary capital. An educational and cultural center, Pretoria is the seat of the Univ. of South Africa (1873), the Univ. of Pretoria (founded 1908 as Transvaal Univ. College), and South Africa's largest industrial research institute. The Transvaal Museum, the National Historical Cultural Museum, and the National Zoological Gardens are also in the city.

Pretorius, Andries Wilhelmus Jacobus (prĕtōr'ē-əs, Du. ăn' drēs vĭlh'el' mas yăkō' bas prătōr'ē-əs), 1799–1853, Boer (Afrikaner) leader. He was elected (1838) commandant general of the Boers of Natal and in that year defeated a large force of Zulus at Blood River. This victory made possible the organization of a Boer Republic of Natal (see KWAZULU-NATAL). In 1848, Pretorius led a party of Boers across the Drakensberg and created there the nucleus of the South African Republic (the TRANSVAAL). The city of PRETORIA was named in his honor.

Pretorius, Martinus Wessel (mărtē'nēs vĕs'əl), 1818?–1901, Boer (Afrikaner) statesman; son of Andries Pretorius. In 1857 he was elected the first president of the South African Republic (the TRANSVAAL), and in 1859, while holding this position, he became the third president of the adjoining Orange Free State Republic (see FREE STATE). In 1863, after failing to effect a union of the two republics, he resigned the presidency of the Orange Free State in order to maintain his position in the Transvaal. As a result of public dissatisfaction at British encroachments Pretorius was forced (1871) from the presidency of the Transvaal. After Great Britain annexed the Transvaal in 1877, he served with Paul Kruger and Petrus Joubert in a government opposed to British rule.

Preussisch Eylau: see BAGRATIONOVSK, Russia.

preventive medicine, branch of MEDICINE dealing with the prevention of disease and the maintenance of good health practices. Until recently preventive medicine was largely the domain of the U.S. Public Health Service or state and local health departments, but it has become an important consideration of HEALTH MAINTENANCE ORGANIZATIONS, private practitioners, and other health care providers. Preventive medicine encompasses such activities as research into causes of disease; VACCINATION against those diseases for which the causes are known, e.g., poliomyelitis, influenza, and measles; studies of environmental deterrents to health; and instruction in public health and hygiene. See also EUGENICS.

Prévert, Jacques (zhăk prăvēr'), 1900–1977, French poet. One of the most popular of 20th-century French writers, Prévert produced poetry ranging from the humorous to the satiric to the melancholy. Many of his poems and songs were sung in nightclubs before being collected and published. His volumes of poetry include *Paroles* (1946), *Spectacle* (1951), and, in English translation, *Selections from Paroles* (1958) and *To Paint the Portrait of a Bird* (tr. by Lawrence Ferlinghetti, 1970). Prévert wrote many important screenplays, including those for Marcel Carné's *Le Jour se lève* (1939) and *Les Enfants du paradis* (1945).

Previn, Sir André (prĕv'ĭn), 1929–, American conductor, composer, and pianist, b. Germany, as Andreas Ludwig Priwin. He has recorded classical music since 1946. In the 1950s he made a number of highly successful jazz piano albums, and he began recording jazz again in the 1990s. He has also composed film scores (which he wrote about in *Minor Chords: My Early Days in Hollywood*, 1991), songs, an opera, and chamber music. Previn conducted the Houston Symphony (1967–69) and the London Symphony (1968–79) and served as musical director of the Pittsburgh Symphony (1976–1984) and the Los Angeles Philharmonic (1986–89), where he remained as conductor until 1992. Conductor laureate of the London Symphony Orchestra since 1992, he continues to compose and to be a frequent piano soloist and chamber player. He is artistic adviser (1991–) to the Caramoor Festival in Katonah, N.Y., conducts and teaches at the BERKSHIRE FESTIVAL, and is a regular guest conductor at the New York Philharmonic.

Prevost, Sir George (prĕ'vō), 1767–1816, British soldier and governor in chief of Canada (1811–15). He held several administrative posts in the West Indies before becoming (1808) lieutenant governor of Nova Scotia. In 1811 he became governor in Canada and was conspicuous for his conciliation of the French Canadians. As commander in chief of the British forces in Canada in the War of 1812, he suffered public humiliation for the retreat at Sackets Harbor (1813) and the defeat at Plattsburgh (1814). He was recalled to England but died before his court-martial started.

Prévost, Marcel (mărsĕl' prăvō'), 1862–1941, French novelist. His novels deal chiefly with feminine questions, portraying severely what Prévost regarded as the moral frailty of modern woman. He won fame with *The Demi-Virgin* (1894, tr. 1895) in which he attacks feminism. His *Lettres à Françoise* (1902–12) presents his program for the ideal education of a girl. The combination of mysticism and eroticism in *Retraite ardente* (1927) aroused protests from the Roman Catholic clergy.

Prévost d'Exiles, Antoine François (ăntwān' frānwă' prăvō' dăgzĕl'), known as **Abbé Prévost** (ăbă' prăvō'), 1697–1763, French novelist, journalist, and cleric. After a dissolute youth he entered (1720) the Benedictine abbey of Saint-Maur. He later had himself transferred to the abbey of Saint-Germain-des-Prés, in Paris, but in 1728 he grew weary of monastic discipline and fled to England. Even before leaving the order, he had begun to write the first of a long series of novels, *Mémoires et aventures d'un homme de qualité* (7 vol., 1728–32). He led an adventurous life in England, Holland, and Germany, but he later returned to France, was received back into the order, and was made head (1754) of a priory by the pope. Only one of Prévost's innumerable writings is still widely read, but that one book ranks among the masterpieces of world literature: *The Histoire du chevalier des Grieux et de Manon Lescaut*, popularly known as *Manon Lescaut* (Vol. VII of the *Mémoires*) is the moving account of the passion of a likeable but weak young man for an amoral woman whose frivolity leads him to crime and her to death as a deportee in America. The novel is admired for its lucid, realistic style and for its psychological insight into moral weakness. Two well-known operas, *Manon*, by Massenet (1884), and *Manon Lescaut*, by Puccini (1893), are based on the novel. Other works by Prévost include *Histoire de Monsieur Cleveland* (4 vol., 1731–32) and a literary journal published at London and later at Paris, *Le*

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bined forces defeated Dingane at the Battle of Magono (January 1840), putting Mpande on the Zulu throne. That same year Pretorius succeeded in getting the Boer settlements in the Transvaal to join in a federal union with Natal.

In 1842 the British occupied Durban, in Natal, and, when Pretorius failed to dislodge them, he resigned as commandant general. After the annexation of Natal, he remained on friendly terms with the British authorities. But when the Cape governor, Sir Henry Pottinger, ignored his plea to settle Boer grievances, Pretorius decided to lead a trek once more to the remote Transvaal (1847). The territory known as the Orange River Sovereignty was annexed by the British the following year, provoking Pretorius and the Transvaal Boers to verbal and then armed protest. After taking Bloemfontein, Pretorius and his followers were defeated at Boomplaats (August 1848). Pretorius fled to the Transvaal with a price of £2,000 on his head.

As one of the four commandants general of the Transvaal, Pretorius played a leading role in negotiations with the British (who had removed the price on his head). That conference resulted in the Sand River Convention (Jan. 17, 1852) by which the independence of the Transvaal (the South African Republic) was recognized. With the British in an anti-imperialist mood, Pretorius pressed further for their acceptance of the independence of the Boers in the Orange River Sovereignty, which was finally guaranteed by the Bloemfontein Convention (February 1854), seven months after his death.

Articles are alphabetized word by word,
not letter by letter

Pretorius, Marthinus Wessel (b. Sept. 17, 1819, near Graaff-Reinet, Cape Colony—d. May 19, 1901, Potchefstroom, South African Republic), Boer statesman, soldier, eldest son of the Great Trek leader Andries Pretorius, and the first president of the South African Republic. Having also served as president of the Orange Free State, he was the only man to have held both offices. Despite that success, however, his plans to unite the sister republics failed.

Pretorius, a man of little formal education, joined his father in the Great Trek (1838) to Natal, where he fought the Zulus. When his father, whom he had accompanied north to the Transvaal, died in 1853, Marthinus succeeded him as commandant general of the districts of Potchefstroom and Rustenburg and continued his father's efforts toward uniting the trekker Boers. After participating in the founding of the South African Republic (an amalgamation of republics in the Transvaal), Pretorius was elected president in 1857; two years later he was also elected president of the Orange Free State. The independent spirit of the Boers combined with Pretorius' own high-handed methods not only prevented the amalgamation of the two states but also led to civil war and anarchy in the Transvaal. In April 1863 he resigned from the Free State presidency and concentrated on reconciling factions in the Transvaal, where he was elected president of a reorganized South African Republic in May 1864.

As head of the South African Republic, Pretorius worked to improve its administration and, with less success, to solve its financial problems. In external affairs, he gained recognition for the republic abroad and sought to extend its boundaries toward Bechuanaland in the west, beyond the Limpopo River, to the north, and toward the sea in the east.

Objections by Portugal and Britain caused him to withdraw most of the claims, however. In 1869 he became president again by an overwhelming vote. His popularity waned, however, when he failed to uphold his nation's claim to the diamond fields in the lower Vaal, especially for allowing Natal's governor to arbitrate the dispute without consulting his own Volksraad (parliament). When the award went against the republic in 1871, Pretorius resigned and retired from public life.

After British annexation of the Transvaal (1877), Pretorius rose once more to prominence as a leader of passive resistance. When the Boers finally rebelled (December 1880), he was appointed a member of the ruling triumvirate and became a signatory to the Pretoria Convention (August 1881), which restored independence. The triumvirate dissolved (May 1883) with the election of Paul Kruger as president. Pretorius then retired permanently.

Pretty Polly (foaled 1901), English racehorse (Thoroughbred) who won 22 of 24 races in her four-year career and earned more than \$130,000. Pretty Polly was foaled by Admiralty and sired by Gallinule. Exceptional from the start of her career, the two-year-old filly won her first race, the British Dominion Plate at Sandown, by 10 lengths according to the official record, but the consensus placed the margin of victory at about 40 lengths. She won her eight other races of the 1903 season and seven races of eight in 1904, including the One Thousand Guineas at Newmarket and the Saint Leger. In 1905 she also won all her races. In her last year of racing, 1906, she won two races. She was not successful at breeding.

pretzel, a brittle, glazed-and-salted cracker of German or Alsatian origin. Made from a rope of dough typically fashioned into the shape of a loose knot, the pretzel is briefly boiled and then glazed with egg, salted, and baked. Pretzels are customarily eaten as a snack with beer.

In many large cities the soft pretzel is a familiar commodity sold hot, often with mustard, from the pushcarts of street vendors. Dry, nut-brown hard pretzels in a variety of configurations, including thick and thin knots, sticks, and nuggets, are commercially packaged in the United States and elsewhere and marketed on a wide scale.

Preuss, Hugo (b. Oct. 28, 1860, Berlin—d. Oct. 9, 1925, Berlin), German political theorist and legal expert who became the principal author of the constitution of the Weimar Republic.

Schooled in the organic-state philosophy of the German political theorist Otto von Guericke, Preuss sustained throughout his own writings the theoretical orientation of his master. A liberal in the politics of Germany under the Kaiser, he belonged to the Progressive People's Party and contributed to such liberal organs as *Nation* and *Die Hilfe* ("Assistance"). As a leading authority on public law, he was commissioned by the new republican government in November 1918 to draft a national constitution. Drawing extensively on both German and foreign concepts and precedents, he contributed a strong preference for administrative centralization; he sought to combine the political and economic principles of both liberalism and Socialism in the constitution. Subsequently, as Weimar minister of the interior (February–June 1919) and then as special government commissioner, he defended his work before the national parliament.

From 1919 he belonged to the German Democratic party. Among his published works, his *Die Entwicklung des deutschen Städtewesens* (1906; "The Development of the Organization and Constitution of German Cities") is probably the most important.

Preussen, see Prussia

preventive detention, the practice of incarcerating accused individuals before trial on the assumption that their release would not be in the best interest of society—specifically, that they would be likely to commit additional crimes if they were released. Preventive detention is also used when the release of the accused is felt to be detrimental to the state's ability to carry out its investigation. In some countries the practice has been attacked as a denial of certain fundamental rights of the accused.

The procedure has been used primarily in civil-law countries, in some of which, particularly France and Belgium, the rights of individuals detained before trial were more carefully protected. In 1970 in France the practice was placed exclusively in the hands of the courts. In Belgium a review of every individual detained in this manner must be held monthly to determine if his release would still constitute a threat to society.

Preventive detention is used to a considerable extent in countries ruled by dictators. It was also found in the Soviet Union, particularly in cases in which the accused individuals were perceived as political or security threats to the government. In such countries, where there was often little concern for the protection of individual rights, preventive detention was left almost exclusively in the hands of police and prosecuting authorities. Where there is greater concern for individual rights, the courts have been given control; but critics maintain that the practice in any form does not lend itself to vigorous and continuous protection of individual rights.

Court-supervised preventive detention was adopted in 1970 in the United States by the federal government for the District of Columbia over much protest that the measure constituted imprisonment without due process and amounted to the curtailment of rights only because of behaviour that might occur. The procedure has been used sparingly, and its constitutionality has not been fully adjudicated in the courts. *See also* accused, rights of; due process.

preventive medicine, efforts directed toward the prevention of disease, either in the community as a whole—an important part of what is broadly termed public health—or in the individual.

Hippocrates, the Greek physician of the 5th century BC, classified causes of disease into those concerned with seasons, climates, and external conditions, and those more personal causes such as irregular food, exercise, and habits of the individual. Through the Middle Ages the principles of preventive medicine were ignored, in spite of the scourges of leprosy and plague. With the Renaissance came the new learning that revolutionized the whole content of medicine. Practitioners again observed the relation of the seasons, environmental conditions, and personal contact to the incidence of disease.

Concurrent with the growth of medical knowledge there was an empirical movement of practical prevention. For example, in 1388 there was passed the first sanitary act in England, directed to the removal of nuisances; in 1443 came the first plague order recommending quarantine and cleansing; and in 1518 the first rough attempts at notification of epidemic disease and isolation of the patient were made. The study of mortality statistics was initiated in England in the 17th century. The basis of epidemiology was laid in the mid-17th century. In 1700 a treatise on occupational disorders was published in Italy. An English practitioner in the first half of the 18th century wrote on poisons, on plague and methods of its prevention, and on smallpox, measles, and scurvy. Vaccination was introduced in the early and middle years of the 19th century were notable for discover-

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lilies and feather stars. It has a small cup-shaped body covered with calcareous plates and with five radiating pairs of feathery flexible arms surrounding the mouth at the top. Sea lilies, most of which are now extinct, are fixed to the sea bottom, coral reefs, etc., by a stalk. Feather stars, e.g. *Antedon*, are free-swimming and are usually found on rocky bottoms. Crinoids occur mainly in deep waters and feed on microscopic plankton and detritus caught by the arms and conveyed to the mouth. The larvae are sedentary. □ fossil.

● **Crippen, Hawley Harvey** ► (1862–1910) US murderer. He poisoned his wife in London and attempted to escape to the USA with his mistress. He was arrested on board ship (following one of the first uses of shore to ship radio) and returned to England, where he was convicted and hanged.

● **Cripps, Sir (Richard) Stafford** ► (1889–1952) British Labour politician. A barrister, Cripps became solicitor general in 1930, before entering parliament in 1931. In 1939 he was expelled from the Labour Party for campaigning for a Popular Front against Neville Chamberlain's appeasement policy. He was ambassador to Moscow (1940–42), minister of aircraft production (1942–45), and, once more in the Labour fold, chancellor of the exchequer (1947–50), when his austere economic policy set Britain on the road to recovery after World War II.

● **Cristofori, Bartolommeo** ► (1655–1731) Italian harpsichord maker and inventor of the ►piano. He constructed the escapement system in which the hammer falls away from the string immediately after striking it, leaving it free to vibrate. A damper stops the sound when the key is released.

● **critical mass** ► The mass of fissile substance that is just capable of sustaining a ►chain reaction within it. Below the critical mass, too many of the particles that might have induced a reaction escape and the chain reaction dies away.

● **critical-path analysis** ► A planning method based on the use of a schematic representation of the network of activities and events involved in a project. Its aim is to aid coordination by identifying the optimum schedule. A critical path is a sequence of activities in which the key parameters, usually time and cost, cannot be increased without endangering the whole project. In large networks, which often need to be analysed by computer, there may be more than one critical path. The method is used in large construction projects.

● **critical state** ► The state of a gas at its critical temperature, pressure, and volume. The critical temperature is the temperature above which a gas cannot be liquefied by increased pressure alone. The vapour pressure of the gas at this temperature is the critical pressure and its volume, the critical volume. In the critical state the density of the vapour is equal to the density of the liquid.

● **Crivelli, Carlo** ► (c. 1430–95) Venetian painter, who settled in Marche in the late 1460s. He is set apart from the Venetian school by his sharp linear style, influenced by ►Mantegna, and the decorative detail that appears in such paintings as *The Annunciation* (National Gallery, London).

● **croaker** ► See drumfish.

● **Croatia** ► (Serbo-Croat name: Hrvatska) A republic in SE Europe, on the Adriatic Sea. It is chiefly mountainous, descending to plains in the NE, where it is drained by the River Drava.

Economy: chiefly agricultural, producing cereals, potatoes, tobacco, fruit, and livestock. Industries include food processing, metallurgy, and the manufacture of textiles. The economy was severely damaged by the conflicts of 1991–95. Tourism, previously a major source of revenue, all but disappeared but has since revived.

History: settled by the Croats in the 7th century AD, the region was successively controlled by Hungary, Turkey, and Austria until the formation of the kingdom of the Serbs, Croats, and Slovenes (later Yugoslavia) in 1918. Following the occupation of Yugoslavia by the Axis Powers in World War II, Croatia was proclaimed an independent state (1941), ruled over by the fascist dictator Ante Pavelić (1889–1959). In 1945 Croatia once more became part of Yugoslavia as a people's republic. Nationalist feeling grew during the 1980s and in 1990 a noncommunist government was formed under Franjo ►Tudjman.

Croatia's declaration of independence in 1991 provoked an invasion by the Serb-led Yugoslav army and fierce fighting ensued. Croatia's independence was recognized by EC and other states in 1992. The mainly Serbian Krajina region declared itself independent from Croatia, but was recaptured by government troops in 1995. Croatia was actively involved in the Bosnian civil war between 1991 and 1995, initially on an opportunistic basis but from 1994 in alliance with the Bosnian government. The authoritarian rule of Tudjman faced growing opposition in the later 1990s. He was re-elected as president in 1998 but the polls were widely condemned as unfair. Following Tudjman's death in 1999, his nationalists were heavily defeated by the centre-left in parliamentary elections.

Croatia

Head of state	President Stipe Mesic
Official language	Croatian
Official currency	kuna
Area	56 538 sq km (22 050 sq mi)
Population (2001 est)	4 393 000
Capital	Zagreb

● **Croatian** ► See Serbo-Croat.

● **Croce, Benedetto** ► (1866–1952) Italian philosopher. Orphaned at 17, he studied art, philosophy, and history at Rome University. His system is expounded in the four-volume *Philosophy of Mind* (1900–10). The only reality, mental, is divided into theoretical and practical. Theoretical reality comprises intuition (art and aesthetics) and conception (philosophy or history—essentially the same, both being accounts of reality). Practical reality comprises individual will (political and economic activity) and universal will (morality). His aesthetic ideas, aired in numerous other works, are the most influential.

● **Crockett, Davy** ► (1786–1836) US frontiersman. As a colonel in the Tennessee militia and member of Congress he cultivated the image of a rough frontiersman. He fought for Texas in its struggle for independence from Mexico and was killed at the ►Alamo.

● **Crockford, William** ► (1775–1844) The founder of Crockford's Club in St James's Street, London. Crockford was a fishmonger until his successes as a gambler enabled him to open his sumptuous club in 1827. The principal attraction was the game of hazard, over which Crockford himself presided and at which he won more than £1,200,000. After his death, the original Crockford's declined, but was revived in the 20th century as a bridge club and is now, again, one of London's leading gambling clubs.

● **crocodile** ► A ►reptile belonging to either of two genera, *Crocodylus* or *Osteolaemus*, and distinguished from alligators and caymans by having a more pointed snout and fewer teeth, the fourth tooth of the lower jaw remaining visible when the mouth is closed. Crocodiles occur chiefly in tropical fresh waters although the estuarine crocodile (*C. porosus*), which reaches a length of 6 m, occurs in coastal waters of SE Asia and Australia.

Crocodiles belong to the order *Crocodylia* (about 20 species), along with alligators and caymans. Crocodylians are amphibious mainly nocturnal carnivores living in tropical and subtropical swamps and rivers, where they prey chiefly on fish but also on water birds and land animals. They have long powerful jaws and a covering of thick protective bony plates; the ears and nostrils are placed high on the head and can be closed by valves when under water. The female builds a nest of mud or vegetation in which over a hundred shelled eggs may be laid. She guards the nest until the young, measuring 20–25 cm in length, begin to hatch. Crocodylians may live for over a hundred years. Their skins are used to make leather goods and this has caused a decline in their numbers.

● **crocodile bird** ► An African riverbank ►courser, *Pluvianus aegyptius*, that feeds on parasites picked from crocodiles. It is 23 cm long and is black with white markings on the throat and above the eyes.

● **Crocus** ► A genus of low-growing plants (75 species), native to Mediterranean regions and widely planted in gardens. They grow from ►corms to produce long thin leaves and six-lobed flowers in

milian, Habsburg heir to the Holy Roman Empire, recognized Vladislav II of Bohemia (1456–1516) as King of Hungary, renouncing his own claim in return for Austria, Styria, and Carinthia, which had been annexed by Matthias I Corvinus in 1486. 2. (1805) The treaty between Austria and France following Napoleon's defeat of Austria at Austerlitz. Austria surrendered territory and paid a large indemnity.



Elvis Presley ► The US pop star at his wedding in Las Vegas in May, 1967, cutting the cake with his bride Priscilla.

● **Press Complaints Commission** ► An organization founded in January 1991 to deal with complaints of unwarranted invasion of privacy and unfair treatment by the press and to ensure that the press maintains the highest professional standards. Funded by the press industry, it comprises both professional and nonprofessional members and an independent chairman. It changed its structure in 1993 in response to criticisms that it was ineffective. It replaced the **Press Council**, founded in 1953 to defend the freedom of the press. Chairman: Lord Wakeham.

● **press gang** ► A band of men employed to force paupers, vagabonds, or criminals into the army or navy. This system of impressment (recruits were paid impress money), common throughout the world in the 18th century, ceased when improved pay and conditions in the army and navy increased voluntary recruitment.

● **pressure** ► Force per unit area. For a liquid, density d , the pressure at a depth h is hdg , where g is the acceleration of free fall. Pressure is usually measured in pascals, millimetres of mercury, or millibars. ► See also atmospheric pressure.

● **pressure gauge** ► An instrument for measuring the pressure of a fluid. Atmospheric pressure is measured with a mercury barometer or an aneroid barometer. Pressures above atmospheric pressure are usually measured with a Bourdon gauge, which consists of a flattened curved tube that tends to straighten under pressure. As it straightens it moves a pointer round a scale. Low pressures are measured with such vacuum gauges as the McLeod gauge or Pirani gauge.

● **pressurized-water reactor** ► (PWR) ► See nuclear energy; thermal reactor.

● **Prestel** ► See viewdata.

● **Prester John** ► A legendary Christian priest king. First mentioned in 12th-century chronicles, he became famous as the hero destined to help the Crusaders against Islam. He was sometimes identified as a Chinese prince but more commonly as the King of Ethiopia.

● **Preston** ► 53 46N 2 42W A city and port in NW England, the administrative centre of Lancashire on the River Ribble. It was the site of a major battle in the Civil War. It has plastics, chemical, motor-vehicle and aircraft construction, and electronics industries as well as the traditional cotton and engineering works. Preston was granted city status in 2002. Population (1991): 177 660.

● **Prestonpans** ► 55 57N 3 00W A town in E central Scotland, in East Lothian on the Firth of Forth. It owes its fame to the defeat here of the English by Bonnie Prince Charlie in 1745. Population (1991): 7014.

● **prestressed concrete** ► See concrete.

● **Prestwick** ► 55 30N 4 37W A town and resort in SW Scotland, in South Ayrshire on the Firth of Clyde. It has an international airport. Population (1991): 13 705.

● **Pretender, Old** ► See James Edward Stuart, the Old Pretender.

● **Pretender, Young** ► See Charles Edward Stuart, the Young Pretender.

● **Pretoria** ► 25 36S 28 12E The administrative capital of South Africa, in the NE of the country. Founded in 1855, it became the capital of the Union of South Africa in 1910. The University of South Africa was founded here in 1873; other important institutions are the University of Pretoria (1930) and the Onderstepoort Veterinary Research Institute. Its industries include iron and steel processing, engineering, and food processing. Population (1991): 1 104 479.

● **Pretoria Convention** ► (1881) The peace treaty between Britain and the Transvaal that ended the first Boer War. The Transvaal acquired self-government under the British Crown, which, however, retained control of foreign relations and the power to veto legislation regarding Africans.

● **Pretorius, Andries (Wilhelmus Jacobus)** ► (1799–1853) Afrikaner leader in the Great Trek to Natal and then in the Transvaal. He defeated (1840) the Zulu King Dingane and fought the British in Natal (1842) and then in the Transvaal (1848), establishing Transvaal's independence as the South African Republic (1852). The city of Pretoria is named after him. His son **Marthinus Wessel Pretorius** (1819–1901) was president of the South African Republic (formerly and subsequently the Transvaal) from 1857 to 1871 and of the Orange Free State from 1859 to 1863. He returned to politics after Britain's annexation of the Transvaal, retiring after Afrikaner victory in the first Boer War (1880–81).

● **Prévert, Jacques** ► (1900–77) French poet. He was associated with the surrealist movement in the 1920s. His best-known poems about the street life of Paris, written with anarchic humour, are collected in *Paroles* (1946); later volumes include *Spectacle* (1951) and *Hebromadaires* (1972). He also wrote film scripts, notably for *Les Enfants du paradis* (1944).

● **Previn, André** ► (Andreas Ludwig Priwin; 1929–) German-born conductor, pianist, and composer. He took US citizenship in 1943. He was conductor of the London Symphony Orchestra (1968–79) and its Conductor Laureate since 1992, conductor of the Pittsburgh Symphony Orchestra (1976–84), and musical director of the Royal Philharmonic Orchestra (1984–86), remaining as its principal conductor. He was also musical director of the Los Angeles Philharmonic Orchestra (1986–89). His first opera, *A Streetcar Named Desire*, was staged in 1998.

● **Prévost d'Exiles, Antoine François, Abbé** ► (1697–1763) French novelist. His unsettled career included periods of military service, of religious retreat as a Benedictine monk, and of exile in England and Holland. Of his many novels and translations, mostly written to pay off debts, the best known is *Manon Lescaut* (1731), the story of a young nobleman ruined by his love for a courtesan, which was used by both Massenet and Puccini as the basis for operas.

● **Priam** ► In Greek legend, the last king of Troy, husband of Hecuba. As an old man he witnessed the deaths of many of his 50 children in the Trojan War and he pleaded with Achilles for the body of Hector. He was killed at the altar of Zeus by Neoptolemus.

● **Priapus** ► A Greek fertility god associated with gardens, son of Dionysus and Aphrodite. He was usually portrayed as a comic ugly figure with an enormous phallus. The donkey, symbol of lust, was sacrificed to him.

● **Pribilof Islands** ► Four US islands in the Bering Sea. They are the breeding ground of the northern fur seal. In 1911 agreements be-

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Baker, Wash.

mapmaker and became a farmer, then served as French consul for many years. He returned to Europe in 1790. His fame rests on *Letters from an American Farmer* (1782, 1784, 1790), essays that paint a broad picture of Amer. life. His *Travels in Upper Pennsylvania and New York* appeared in 1801. Newly discovered essays were published as *Sketches of Eighteenth Century America* in 1925. In his time he was the most widely read commentator on America.

cribbage Card game, usually for two players, in which each tries to form various counting combinations of cards, the score being kept by moving pegs on a narrow rectangular board. Each player receives six cards. (There is also a five-card variant, as well as four-hand and three-hand variants.) Cribbage was invented by the 17th-cent. English poet J. Suckling. The rules of play, though somewhat involved, are simple enough to make cribbage a popular pastime, particularly in Britain and the N U.S. The game usually ends at 121 (twice around the board plus one).

crib death See sudden infant death syndrome

Crichton \ˈkri-tən\, James (1560-1582) Scottish scholar and adventurer. After graduating from the Univ. of St. Andrews, he publicly distinguished himself in Europe in learned activities. He entered the service of the duke of Mantua, but was slain in a street fight at 21. Reputedly a fine orator, linguist, debater, and man of letters, he was considered the model of the cultured gentleman, though admirers probably exaggerated his accomplishments. Years later he became known as "the Admirable Crichton."

Crick, Francis (Harry Compton) (b.1916) British biophysicist. Educated at University College London, he helped develop magnetic mines for naval use during World War II, but returned to biology after the war. He worked at Cambridge Univ. with J. Watson and M. Wilkins to construct a molecular model of DNA consistent with its known physical and chemical properties, work for which the three shared a 1962 Nobel Prize. Crick also discovered that each group of three bases (a codon) on a single DNA strand designates the position of a specific amino acid on the backbone of a protein molecule, and he helped determine which codons code for each amino acid normally found in protein, thus clarifying the way the cell uses DNA to build proteins. See also R. Franklin.

cricket (from Middle French *criquet*, "goal stake") Game played with a ball and bat by two sides of 11 players each on a large field centering on two wickets, each defended by a batsman. A bowler throws the ball (with a straight-arm overhand delivery), attempting to hit the wicket, which is one of several ways the batsman may be put out. Runs are scored each time the batsmen exchange positions without being put out. Cricket's origins are uncertain. It was first definitively recorded in England in the late 16th cent, and the first set of rules was written in 1744. During England's colonial history, it was exported to countries around the world. Cricket matches are divided into innings consisting of one turn at bat (approximately 10 batters) for each team; depending on pregame agreement, a match may consist of either one or two innings. International championship tournaments are under the auspices of the Test and Country Cricket Board (TCCB).

cricket Any of the approximately 2,400 species of leaping insects (family Gryllidae) known for the musical chirping of the male. Crickets vary in length from around 0.1 to 2 in. (3-50 mm) and have thin antennae, hind legs modified for jumping, and two abdominal sensory appendages (cerci). Their two forewings are stiff and leathery, and the two long, membranous hind wings are used in flying. Male crickets chirp by rubbing a scraper located on one forewing along a row of 50-250 teeth on the opposite forewing. The most common cricket songs are the calling song, which attracts the female; the courtship, or mating, song, which induces the female to copulate; and the fighting chirp, which repels other males.

crime Act, usually deemed socially harmful or dangerous, that is prohibited by public law and that carries a specific punishment (e.g., incarceration or a fine). Crimes in the common-law tradition were originally defined primarily by judicial decision. Most common-law crimes are now codified. A general principle, *nul-lum crimen sine lege*, says that there can be no crime without a law. A crime generally consists of both conduct (the *actus reus*) and a concurrent state of mind (the *mens rea*). Criminal acts include arson, assault, bribery, burglary, child abuse, coun-

terfeiting, embezzlement, extortion, forgery, fraud, hijacking, homicide, kidnapping, perjury, piracy, rape, sedition, smuggling, treason, theft, and usury. See also rights of the accused, arrest, conspiracy, criminal law, criminology, felony and misdemeanor, indictment, statute of limitations, self-incrimination, sentence, war crime.

Crimea \kri-mē-ə\ Administrative subdivision (pop., 1991 est.: 2,550,000), S Ukraine, coextensive with the Crimean Peninsula, which extends into the Black Sea. It covers 10,400 sq mi (27,000 sq km); its capital is Simferopol. Early inhabitants were Cimmerians, though the area later was settled by Greeks in the 6th cent. BC, and ruled by the kingdom of the Cimmerian Bosphorus from the 5th cent. BC. It became subject to Rome, and part of it later belonged to the Byzantine empire. Russia annexed Crimea in 1783. It was the scene of the Crimean War (1854-56). In 1921 it became an autonomous republic of the Russian S.S.R. During World War II Nazi armies overran it in 1941; it was retaken in 1944. The area became an oblast of Ukraine in 1954. After the dissolution of the Soviet Union in 1991, Crimea obtained partial autonomy from Ukraine.

Crimean War (Oct. 1853-Feb. 1856) War fought mainly in the Crimea between the Russians and an alliance consisting of the Ottoman empire, Britain, France, and Sardinia-Piedmont. It arose from the conflict of great powers in the Middle East and was more directly caused by Russian demands to exercise protection over the Orthodox subjects of the Ottoman sultan. The war was managed and commanded poorly by both sides. Battles were fought at the Alma River, Balaklava, and Inkerman, before the besieged Sevastopol was taken by the allies. Disease accounted for many of the approximately 250,000 men lost by each side. After Austria threatened to join the allies, Russia accepted preliminary peace terms, which were formalized at the Congress of Paris. The war did not settle the relations of the powers in Eastern Europe, but it did alert Alexander II to the need to modernize Russia.

criminal law Body of law that defines criminal offenses, regulates the apprehension, charging, and trial of suspected offenders, and fixes punishment for convicted persons. Criminal offenses are those construed as being against the state. Substantive criminal law defines crimes, and procedural law establishes procedure for the prosecution of crime. Today's substantive criminal law originated for the most part in common law, which was later codified in federal and state statutes. Modern criminal law has been affected considerably by the social sciences, especially with respect to sentencing, legal research, legislation, and rehabilitation. See also criminology.

criminology Scientific study of nonlegal aspects of crime, incl. its causes and prevention. Criminology originated in the 18th cent. when social reformers began to question the use of punishment for retribution rather than deterrence and reform. In the 19th cent., scientific methods began to be applied to the study of crime. Today criminologists commonly use statistics, case histories, official records, and sociological field methods to study criminals and criminal activity, incl. the rates and kinds of crime within geographic areas. Their findings are used by lawyers, judges, probation officers, law-enforcement and prison officials, legislators, and scholars to better understand criminals and the effects of treatment and prevention. See also delinquency, penology.

Cripps, (Richard) Stafford (later Sir Stafford) (1889-1952) British statesman. A successful lawyer, he served in Parliament 1931-50. On the extreme left of the Labour Party, he helped found the Socialist League in 1932. After serving as ambassador to Moscow (1940-42), he joined the British war cabinet and conducted the Cripps Mission (1942), an unsuccessful attempt to rally Indian support against the Japanese. As chancellor of the exchequer (1947-50), he instituted a rigid austerity program to revive Britain's economy.

Crispi \ˈkrēs-pē\, **Francesco** (1819-1901) Italian politician. A Sicilian, he was exiled for his revolutionary activities. He became an associate of G. Mazzini and encouraged G. Garibaldi to conquer Sicily in 1860. He served as a deputy from Sicily in the new Italian parliament (1861-96) and held office in several leftist governments. As premier (1887-91, 1893-96), he instituted liberal reforms and later improved the economy, but became increasingly repressive. He embarked on a disastrous foreign policy, organizing Eritrea as a colony and attempting colonial expansion in Africa. He was forced to resign after the Italian defeat at the Battle of Adowa.

Cristofano de Giudici, Francesco di See Franciabigio
Cristofori \ˈkrē-stō-fō-rē\, **Bartolomeo** (1655-1731) Italian musical-instrument maker. As custodian of musical instruments at the court of Prince Ferdinand de' Medici, he maintained a variety of instruments. His most famous experiment was the pianoforte, ancestor of the modern piano, which he worked on from 1698, an instrument that, unlike the harpsichord, could produce changes in volume of sound depending on the force



hero. He went on to lead the Brazilian Communist Party, which advocated ending payments on the national debt, nationalization of foreign-owned companies, and land reform. Imprisoned after a violent uprising in 1935, he was released after World War II, and later served briefly as a senator.

Preston City (pop., 1994 est.: 133,000), county seat of Lancashire, England, on the Ribble River. It grew near the site of a Roman fort and received its first charter in 1179. As a market center, it became known for its woolen and linen weaving and its cotton mills. It was the site of the Lancashire Royalist headquarters during the English Civil Wars. The Royalists were defeated there by O. Cromwell in 1648. Despite the decline of the cotton textile industry, the economy has remained strong through diversification, and it produces aircraft and motor vehicles.

prestressed concrete Concrete reinforced by either pretensioning or posttensioning, allowing it to carry a greater load or span a greater distance than ordinary reinforced concrete. In pretensioning, lengths of steel wire or cables are laid in the empty mold and stretched. The concrete is placed and allowed to set, and the cables are released, placing the concrete into compression as the steel shrinks back to its original length. In posttensioning, the steel in the concrete is stretched after the curing process. Prestressing places a concrete member in compression; these compressive stresses counteract the tensile bending stresses of an applied load. The process was developed by the French engineer Eugène Fressinet in the early 20th cent.

Pretoria \pri-'tör-ē-ə\ City (metro. area pop., 1991: 1,080,000), administrative capital of the Republic of S. Africa. Founded in 1855, it became the capital of the Transvaal in 1860, the administrative capital of S. Africa in 1910, and a city in 1931. During the S. African War in 1899, W. Churchill was imprisoned there until his escape. Pretoria is primarily a seat of government, and most people are employed in the service sector. It is also an important rail center, with an industrial economy based on iron and steel. Its educational institutions include the Univ. of S. Africa and the Univ. of Pretoria. See also Bloemfontein, Cape Town.

Pretorius \pra-'tū-rē-ēs\, **Andries** (1798–1853) Boer leader in the Great Trek from British-dominated Cape Colony who became the dominant military and political figure in Natal and the Transvaal. Pretorius's forces defeated the Zulu at Blood River in 1838 and at Magono in 1840. In 1842 he led an unsuccessful fight with the British over the annexation of Natal. Following British annexation of Transvaal in 1848, his forces again attacked and were again defeated. In 1852 he participated in the Sand River Convention, where Transvaal independence was recognized. He led negotiations for independence of the Orange River Sovereignty, finally guaranteed by the Bloemfontein Convention of 1854. His son Marthinus Wessel Pretorius (1819–1901) was the first president of the S. African Republic (1857, 1864, 1869) and president of the Orange Free State (1859–63). After British annexation of the Transvaal, Marthinus joined insurgent Boer leaders and helped win recognition of its independence. He was a member of the ruling triumvirate until the election of P. Kruger as president in 1883.

preventive medicine Efforts toward disease prevention in the community and the individual. It covers patient interviews and testing to detect risk factors; sanitary measures in homes, communities, and medical facilities; patient education; and diet and exercise programs as well as preventive drugs and surgery. It has three levels: primary (e.g., prevention of coronary heart disease in a healthy person), secondary (e.g., prevention of heart attack in a person with heart disease), and tertiary (e.g., prevention of disability and death after a heart attack). The first is by far the most economical. Important advances in preventive medicine include vaccination (see vaccine), antibiotics, diagnostic imaging, and recognition of psychological factors. See also epidemiology, immunology, occupational medicine, quarantine.

Prévert \prä-'ver\, **Jacques (-Henri-Marie)** (1900–1977) French poet and screenwriter. A shop worker, he began writing after his military service. Influenced by the Symbolist movement, he renewed the ancient tradition of oral poetry, creating "song poems" about Paris street life, collected in the anthology *Words* (1945). Many were put to music and became extremely popular. His excellent screenplays for M. Carné include *The Children of Paradise* (1945), *Spectacle* (1951), and *Things and Other Things* (1972). He also worked for French television and on animated films for children.

Previn \pre-'vin\, **André (George)** *orig.* Andreas (Ludwig) Priwin (b.1929) U.S. (German-born) pianist, composer, and conductor. Born in Berlin, he fled Nazi persecution with his family and moved to Los Angeles in 1939. He orchestrated and arranged music for MGM in the 1940s and '50s, and thereafter scored films for several studios. Meanwhile he had become a noted classical and jazz pianist and started conducting. He has served as principal conductor of the Houston Symphony, London Symphony, Pittsburgh Symphony, Los Angeles Philharmonic, and

Royal Philharmonic orchestras. He has also composed a symphony, concertos, and the opera *A Streetcar Named Desire* (1998), as well as popular songs. He was awarded a British knighthood (KBE) in 1996 and a Kennedy Center Honor in 1998.

Prévost d'Exiles \prä-'vō-däg-'zēl\, **Antoine-François** *known as Abbé Prévost* (1697–1763) French novelist. From an early age Prévost alternated between enlistments in the army and entries into the religious life, which he eventually fled in 1728. Subsequent years were marked by numerous love affairs and debt. His fame rests entirely on one work—*Manon Lescaut* (1731), a sentimental novel about a young man of good family who ruins his life for a courtesan, which became the basis of two famous operas, J. Massenet's *Manon* and G. Puccini's *Manon Lescaut*.

PRI See Institutional Revolutionary Party

Priam \pri-'ām\ In Greek mythology, the last king of Troy. He succeeded his father Laomedon as king and gradually expanded Troy's control over the Hellespont. By his wife, Hecuba, he had many children, incl. Hector and Paris. He reigned during the Trojan War; in its final year he lost 13 sons, three of whom were killed by Achilles in a single day. Hector's death broke his spirit, and he went humbly to Achilles to ask for the corpse. When Troy fell, Achilles' son Neoptolemus killed the elderly Priam on an altar.

Priapus \pri-'ā-pəs\ Greek god of animal and vegetable fertility. He was represented in a caricature of the human form, grotesquely misshapen, with an enormous phallus. The ass was sacrificed in his honor, probably because it symbolized lecherousness and was associated with the god's sexual potency. His father was Dionysus and his mother was either a local nymph or Aphrodite. In Hellenistic times the worship of Priapus spread throughout the ancient world, and he was adopted as the god of gardens.

Pribilof Islands \pri-bə-'lōf\ Group of islands, SE Bering Sea, Alaska. It includes St. Paul, St. George, and two islets, and is about 300 mi (500 km) west of the mainland. Control of the islands was transferred from Russia to the U.S. with the Alaska Purchase (1867). The islands are hilly with no harbors and are breeding grounds from April to November for most of the world's fur seals. Commercial seal killing is governed by a convention signed by the U.S., U.S.S.R., Japan, and Canada in 1957. The islands are also home to enormous numbers of birds and blue and white foxes. The indigenous population is made up of Aleuts.

price Amount of money that has to be paid to acquire a given good, service, or resource. Operating as a measure of value, prices perform a significant economic function, distributing the scarce supply of goods, services, and resources to those who most want them through the adjustments of supply and demand. Prices of resources are called wages, interest, and rent. This system, known as the price mechanism, is based on the principle that only by allowing prices to move freely will the supply of any given commodity match demand. If supply is excessive, prices will be low and production will be reduced; this will cause prices to rise until there is a balance of demand and supply. If supply is inadequate, prices will be high, prompting an increase in production that in turn will lead to a reduction in prices until supply and demand are in equilibrium. A totally free price mechanism does not exist in practice; even in free-market economies, monopolies or government regulation may limit the efficiency of price as a determinant of supply and demand. In centrally planned economies, the price mechanism may be supplanted by centralized government control. Attempts to operate an economy without a price mechanism usually result in surpluses of unwanted goods, shortages of desired products, black markets, and stunted economic growth.

Price, (Mary Violet) Leontyne (b.1927) U.S. soprano. Born in Laurel, Miss., she was trained at the Juilliard School. Picked by V. Thomson for a revival of *Four Saints in Three Acts*, she made her name in the international tour of *Porgy and Bess* (1953–55). She sang Aida at La Scala in 1960, and made her Metropolitan Opera debut in 1961. She was one of the Met's most popular stars for more than two decades, creating the role of Cleopatra in S. Barber's *Antony and Cleopatra* (1966), which opened the new Met at Lincoln Center, and singing her last Aida in 1985.

Price, Vincent (1911–1993) U.S. actor. Born in St. Louis, he made his London stage debut as Prince Albert in *Victoria Regina* (1935), then reprised the role on Broadway. In 1938 he went to Hollywood, where he became known for his cultivated manner and silken voice. He played historical roles in *The Private Lives of Elizabeth and Essex* (1939), *Hudson's Bay* (1941), and *The Three Musketeers* (1948). He was the menacing villain in horror movies such as *House of Wax* (1953) and *Diary of a Madman* (1963) as well as a series of R. Corman movies adapted from E. A. Poe stories, incl. *The Masque of the Red Death* (1964).

price discrimination Practice of selling a commodity at different prices to different buyers, even though sales costs are the same

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Edited by David Crystal



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arms on upper surface; most feed on suspended particles transported to the mouth via food grooves on arms; long fossil record; c.650 living species found from shallow waters to deep sea; also known as **sea lilies** and **feather stars**. (Phylum: Echinodermata. Class: Crinoidea.)

Crippen, Hawley Harvey, known as **Dr Crippen** (1862–1910) Murderer, born in Michigan, USA. He studied medicine and dentistry, eventually settling in London, UK (1900) with his second wife, Cora Turner. Having transferred his affections to his secretary, Ethel le Neve, he poisoned his wife, dissected the body, and interred the remains in the cellar. He and his mistress attempted to escape to Canada on board the SS *Montrose* as Mr and Master Robinson. The suspicious captain contacted Scotland Yard by radiotelegraphy (the first use of radio for a murder case). They were arrested, and Crippen was hanged in London.

Cripps, Sir (Richard) Stafford (1889–1952) British statesman, born in London, UK. He studied at London University, was called to the bar in 1913, and made a fortune in patent and compensation cases. In 1930 he was appointed solicitor general in the second Labour government, and became an MP in 1931. During the 1930s he was associated with several extreme left-wing movements, and was expelled from the Labour Party in 1939 for his 'popular front' opposing Chamberlain's policy of appeasement. He sat as an independent MP during World War 2, was ambassador to the Soviet Union (1940–2), and in 1942 became Lord Privy Seal, and later minister of aircraft production. In the 1945 Labour government, he was readmitted to the Party and appointed President of the Board of Trade. In 1947 he became minister of economic affairs and then Chancellor of the Exchequer, introducing a successful austerity policy. In 1950 he resigned due to illness.

crisis apparition apparition

crisis management A term first employed by Robert McNamara shortly after the 1962 Cuban missile crisis. It implies, given the limited availability of information about other actors, and their unpredictability, that long-term strategic planning cannot provide the basis for action. Crises between states can be resolved only by managing them as they arise.

crisis theology A type of Protestant theology initiated after World War 1 under the inspiration of Karl Barth (1886–1968), and very influential during the 1920s and 1930s. The term 'crisis' essentially applied to the judgment (Gr *krisis*) of God upon all merely human social, moral, and religious endeavours. The approach exercised a decisive influence on the Declaration of Barmen (1934) which, in opposition to the readiness of the so-called 'German Christians' to integrate the racialist ideology of the German National Socialists into Christian doctrine, affirmed Jesus Christ as God's sole and sufficient revelation and denied any revelations in nature, history, or race apart from him.

Cristóbal Colón, Pico [peekoh kreestohbal kohlon] Snow-capped Andean peak in N Colombia; rises to 5800 m/19 029 ft, 113 km/70 mi E of Barranquilla; highest peak in Sierra Nevada de Santa Marta and in Colombia.

Cristofori, Bartolomeo [kristoforee] (1655–1731) Harpsichord-maker, born in Padua, NE Italy. He is usually credited with the invention of the pianoforte in c.1710.

criterion-referenced test A test which requires the candidate to meet a set of criteria, as opposed to a **norm-referenced test** which simply ranks students alongside others. Thus a criterion-referenced test in mathematics might list for each grade what a student must do to obtain that grade, eg be able to convert a fraction to a decimal, or multiply two three-digit numbers.

critical mass The smallest mass of material of a given type and formed into a given shape able to sustain a nuclear-fission chain reaction. For a mass of material greater than the critical mass, large amounts of energy are released via the fission-chain reaction in a small fraction of a second. For a sphere of uranium-235,

the critical mass is 52 kg/114.6 lb, corresponding to a radius of 8.7 cm/3.4 in.

critical phenomena The physical properties of systems at their critical points, ie at the temperature where the distinction between two phases vanishes. They are typified by dramatic changes in the parameters used to describe the system; for example, the spontaneous magnetization of iron is reduced to zero when its temperature is raised beyond the critical temperature (the *Curie point*). Critical phenomena are observed in many systems, such as the superfluid, superconducting, ferroelectric, and ferromagnetic transitions. Certain aspects are nevertheless common to all.

critical point (physics) *critical phenomena*

critical theory *Frankfurt School*

Crittenden Compromise (1860) In the months preceding the American Civil War, an attempt by Senator John J Crittenden of Kentucky to resolve the crisis between North and South by formally recognizing slavery in territories S of 36°30'. This proved unacceptable to Abraham Lincoln, whose election as president was causing secession by the slave-holding South.

croaker *drumfish*

Croatia p. 401

Croce, Benedetto [krohchay] (1866–1952) Philosopher, historian, and critic, born in Pescasseroli, EC Italy. He studied at Rome, and in Naples devoted himself at first to literature and antiquarian studies, founding the review, *La Critica* (1903), and making major contributions to idealistic aesthetics in his *Estetica* (1902, Aesthetic) and *La Poesia* (1936, Poetry). In 1910 he became senator, and was minister of education (1920–1) when, with the rise of Mussolini, he had to resign his professorship at Naples. He was opposed to totalitarianism, and with the fall of Mussolini (1943) helped to resurrect Liberal institutions in Italy.

crocket [krokrit] In Gothic architecture, a decorative leaf-shaped carving, projecting from the raking lines of spires, pinnacles, canopies, etc. It is particularly common in English Decorated style churches.

Crockett, Davy, popular name of **David Crockett** (1786–1836) Backwoodsman, born in Green Co, Tennessee, USA. He distinguished himself against the Creek Indians in Jackson's campaign of 1814, and was elected to the Tennessee state legislature (1821) and to the Congress (1826). He died fighting for Texas at the Battle of the Alamo. Highly embellished stories of his exploits have assumed mythological proportions.

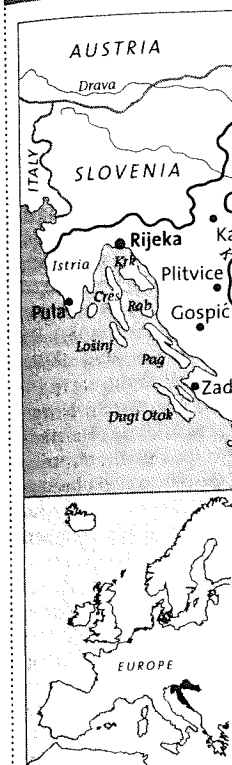
Crockford, William (1775–1844) British founder of a famous gaming club in London (1827). He was previously a fishmonger, but his successes at gambling led to a change in his fortunes. He is reputed to have won over £1 million at the game of hazard.

crocodile A reptile native to tropical rivers and estuaries worldwide (estuarine species sometimes cross open sea); length, up to 7.5 m/25 ft; fourth tooth from the front on each side of the lower jaw is visible when the jaws are closed (unlike the alligator); snout long and slender, or short and broad; eats a range of vertebrate prey; eggs have hard shells (like birds' eggs). Crocodilians (crocodiles, alligators, and the gharial) are the descendants of an ancient reptile group, the *archosaurs* (which included the extinct dinosaurs and pterodactyls) and have changed little in appearance during the last 65 million years. (Order: Crocodilia. Family: Crocodylidae, 14 species.)

crocodile-bird The name used for birds reported to feed on parasites and food residue found in the mouths of basking crocodiles. It is not certain that such feeding occurs, but the name is sometimes used for any birds frequently found associating with crocodiles, such as certain plovers or the **common sandpiper** (*Actitis hypoleucos*).

crocus A perennial producing corms, native to Europe and Asia; leaves grass-like with distinctive silvery stripe down centre; stalkless flowers, goblet-shaped with long, slender tube, mainly white, yellow, or purple, closing up at night; many cultivated for ornament. The autumn-flowering species produce flowers

Croatia



□ International Airport

[krohaysha], official name

Republika Hrvatska

Local name Hrvatska

Timezone GMT + 1

Area 56 540 km²/21 825

Population total (2000)

Status Republic

Date of independence

Capital Zagreb

Language Croatian

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Prestel An interactive computer-based information system provided over the telephone network in the UK by British Telecom. It provides access to a wide variety of information sources.

Prester John A mythical Christian priest-king of a vast empire in C Asia. Reports of his existence, wealth and military might, substantiated by a letter purporting to have come from him in 1165, raised the morale of Christian Europe as it faced the Muslim threat. The story probably arose both from reports of Nestorian Christians in Asia and more obviously of the African Christian kingdom of Ethiopia, which had been cut off by the Islamic conquest of Egypt. 'Prester' comes from Old French *prestre*, 'priest'.

Preston 53°46N 2°42W, pop (2000e) 132 300. City and county town of Lancashire, NW England, UK; 45 km/28 mi NW of Manchester, on the R Ribble; site of Royalist defeat in the Civil War (1648); 19th-c centre of the cotton industry; birthplace of Richard Arkwright; city status granted 2002; railway; University of Central Lancashire (1992, formerly Lancashire Polytechnic); electrical goods, engineering, textiles, plastics, chemicals; Harris museum; Preston Guild Fair every 20 years; football league team, Preston North End (Lillywhites).

Prestonpans [prestinpanz] 55°57N 3°00W, pop (2000e) 8080. Town in East Lothian, E Scotland, UK; on S shore of Firth of Forth, 5 km/3 mi NE of Musselburgh; railway; coal processing; site of Scottish victory over the English (1745).

Prestwick 55°30N 3°12W, pop (2000e) 13 700. Town in South Ayrshire, SW Scotland, UK; on the W coast, 4.8 km/3 mi N of Ayr; airport (the official international gateway for Scotland); railway; aerospace engineering.

Pretoria [pritawria] 25°45S 28°12E, pop (2000e) 613 000 (metropolitan area). Administrative capital of South Africa, and alternative capital of Gauteng province; 48 km/30 mi NE of Johannesburg; altitude 1369 m/4491 ft; founded, 1855; capital of South African Republic, 1881; railway; two universities (1873, 1908); railway engineering, vehicles, iron and steel, chemicals, cement, leather; Voortrekker Memorial, Paul Kruger Memorial, Transvaal Museum.

Pretorius, Andries (Wilhelmus Jacobus) [pretawrius] (1799–1853) Afrikaner leader, born in Graaff-Reinet, S South Africa (then Cape Colony). A prosperous farmer, he joined the Great Trek of 1836 into Natal, where he was chosen commandant-general. He later accepted British rule, but after differences with the governor he trekked again, this time across the Vaal. Eventually the British recognized the Transvaal Republic, later the South African Republic, whose new capital was named Pretoria after him.

Pretorius, Marthinus (Wessel) [pretawrius] (1819–1901) Afrikaner soldier and statesman, president of the South African Republic (1857–71), born in Graaff-Reinet, S South Africa, the son of Andries Pretorius. He succeeded his father as commandant-general in 1853, and was elected president of the South African Republic, and of the Orange Free State (1859–63). He fought against the British again in 1877, until the independence of the Republic was recognized (1881), then retired.

prevalence (of disease) *disease frequency*

preventive medicine A branch of medical practice that is concerned with the prevention of disease. This is achieved by measures that (1) control the environment, such as clean air legislation, (2) ensure a hygienic and suitable food and water supply, (3) promote mass medication (eg schemes of immunization), (4) organize programmes for the eradication of disease (eg smallpox, diphtheria), and (5) promote safer life styles largely by education (eg the reduction in smoking to prevent cancer of the lung, and the promotion of condoms to reduce the possibility of AIDS).

Prévert, Jacques [prayvair] (1900–77) Poet, born in Neuilly-sur-Seine, NC France. He was involved with the Surrealists, and wrote songs, pieces for cabaret, and scenarios for Renoir, as well as the screenplay for the celebrated film, *Les Enfants du Paradis* (1946, *The Children of Paradise*). The piquant mixture of

wit and sentiment in his poetry proved very popular; collections include *Paroles* (1946, *Words*), *La Pluie et le beau temps* (1955, *Rain and Fine Weather*), and *Choses et autres* (1972, *Things and Others*).

Previn, André (George) [previn] (1929–) Conductor and composer, born in Berlin, Germany. His family fled from Nazi Germany to the USA in 1938. He studied music mainly in California and Paris, spent some years as a jazz pianist, and became musical director of symphony orchestras at Houston (1967–9), London (1968–79), Pittsburgh (1976–86), and Los Angeles (1986–9). He became composer laureate of the London Symphony Orchestra in 1991, and conductor laureate the following year. He has composed musicals, film scores, and orchestral works, and achieved popular success both on television and in the concert hall by bringing classical music to the attention of a wide public. His books include *Music Face to Face* (1971) and *André Previn's Guide to Music* (1983). He was given an honorary knighthood in 1996.

Prévost, (Antoine François), l'Abbé [prayvoh] (1697–1763) Novelist, born in Hesdin, N France. He spent some years in the army, became a Benedictine monk, then lived in exile in England and Holland. He wrote many novels and translations, but is best known for *Manon Lescaut* (1731), originally published as the final part of a seven-volume novel. Having returned to France by 1735, he was appointed honorary chaplain to the Prince de Conti.

Priam [priyam] In Greek legend, the King of Troy. He was son of Laomedon, and husband of Hecuba, and is presented in the *Iliad* as an old man. When Hector was killed, he went secretly to Achilles to beg his son's body for burial. At the sack of Troy, he was killed by Neoptolemus.

Pribilof Islands [pribilof] Group of four islands in the Bering Sea, Alaska, USA; two inhabited (St Paul, St George); area 168 sq km/65 sq mi; centre of seal fur trade.

Price, (Mary Violet) Leontyne (1927–) Soprano, born in Laurel, Mississippi, USA. She studied at the Juilliard School, New York City. A notable Bess (1952–4) in Gershwin's *Porgy and Bess*, she was the first black opera singer on television, in *Tosca* for NBC (1955). An outstanding Verdi singer, she was also much associated with Barber's music.

Price, Nick, popular name of **Nicholas Raymond Leige Price** (1957–) Golfer, born in Durban, E South Africa. His family moved to Zimbabwe, where he began playing golf as a child. At age 17 he won the Junior World Tournament in San Diego, and turned professional in 1977. Notable wins include the PGA World Series (1983), the United States PGA Championship (1992, 1994), and the British Open (1994). He finished the 1994 PGA tour as top money winner, having earned nearly \$1.5 million.

Price, Vincent (Leonard) (1911–93) Actor and writer, born in St Louis, Missouri, USA. He travelled in Europe, studied at Yale, and became an actor. He made his screen debut in 1938, and after many minor roles he began to perform in low-budget horror movies such as *House of Wax* (1953), achieving his first major success with *The Fall of the House of Usher* (1960). Known for his distinctive, low-pitched, creaky, atmospheric voice, and his quizzical, mock-serious facial expressions, he went on to star in a series of acclaimed Gothic horror movies, such as *The Pit and the Pendulum* (1961) and *The Abominable Dr Phibes* (1971). He abandoned films in the mid-1970s, going on to present cookery programmes for television - he wrote *A Treasury of Great Recipes* (1965) with his second wife, Mary Grant - but he had two last roles in *The Whales of August* (1987) and *Edward Scissorhands* (1991).

price index *retail price index*

prices and incomes policy An attempt by government to control inflation by acting directly on prices and wages, either by persuasion or by law. This contrasts with the view that inflation should be controlled by monetary or fiscal policies to influence demand, or supply-side measures to improve productivity. The correct structure of prices and wages is controversial, and the

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require the existence of *what is not*. Parmenides rejected the idea of *what is not* as inconceivable. He said the universe is uniform, immovable, and unchanging, with no generation or destruction.

Parmenides had few followers but great influence. His opponents could not disprove his reasoning, and so they tried to reconcile his conclusions with common sense. Empedocles agreed that there could be no generation or destruction. He explained their apparent existence in terms of four eternal elements—earth, air, fire, and water—mixed by the force of *love* and separated by *strife*. Anaxagoras believed an infinite number of elements had been separated out of an original mixture through the rotation initiated by a force or material he called *Mind*. Each kind of natural substance contains all the elements but in different proportions. Anaxagoras thought matter was infinitely divisible.

In the late 400's B.C., Leucippus and Democritus responded to Parmenides with a theory called *atomism*. They taught that the universe consists of tiny, solid, indivisible bodies called *atoms*, which move about in space and cluster together to form the larger objects of common experience. S. Marc Cohen

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Anaxagoras	Atomism	Parmenides	Socrates
Anaximander	Empedocles	Pythagoras	Thales
Anaximenes	Heraclitus		

Press. See Freedom of the press; Journalism; Newspaper; Printing; Printing press.

Pressburg. See Bratislava.

Pressure is often defined as force per unit area. In physics, the term is usually applied to *fluids* (gases or liquids). If a fluid is exposed to suitable forces, pressure is produced in it. The greater the force, the greater the pressure. Pressure is measured in pounds per square inch in the inch-pound system customarily used in the United States. In the metric system, the standard unit of pressure is the pascal; the nonstandard unit kilogram per square centimeter is also used.

Atmospheric pressure is produced by the weight of the air from the top of the atmosphere as it presses down upon the layers of air below it. At sea level, the average atmospheric pressure is 14.7 pounds per square inch (101.3 kilopascals). This decreases with altitude because of less air pressing from above.

If a fluid is at rest, pressure is transmitted equally to all its parts and, at any one point, is the same in all directions. The fluid acts this way because the molecules in it move freely. The molecules are far apart in a gas and comparatively close together in a liquid.

French scientist Blaise Pascal discovered that pressure in a fluid is transmitted equally to all distances and in all directions. He formulated *Pascal's law* to describe the effects of pressure within a fluid (see *Pascal's law*).

The greater the pressure in a gas, the smaller its volume. This decrease in volume occurs because the molecules are pushed closer together. Under ordinary conditions, the volume of a gas decreases by half when the pressure doubles. The law that describes how the volume of a gas changes when the pressure changes is called *Boyle's law*, after Robert Boyle, the Irish scientist who first developed it. The volume of liquids and solids also decreases when pressure increases, but by much smaller amounts than for gases.

The ability of a gas to compress and expand has many practical uses. For example, air tires, air cushions, and air brakes are based on this elasticity of air.

Pressure changes the boiling point of water. The boiling point is that temperature at which the pressure of the steam is equal to the atmospheric pressure. At sea level, the two pressures are equal at 212 °F (100 °C). As height increases, the pressure decreases, and the boiling point becomes lower. This makes cooking at high altitudes difficult, because cooking depends on the temperature to which the food is heated, not on whether the surrounding water is boiling. See **Boiling point**.

Wind is the movement of air from a point of high pressure to a point of low pressure. Pressure changes precede storms. Barometers detect storms by measuring such changes. Michael Dine

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Prestor John (or *Presbyter John*) was a legendary Christian priest and king of the 1100's. Many travelers of the Middle Ages, including Marco Polo, claimed that he ruled a vast kingdom in central Asia. Later reports made him the emperor of Ethiopia. Pope Alexander III sent a messenger to look for him in 1177, but the messenger never returned. Stanley K. Stowers

Pretoria, *prih TOHR ee uh*, became South Africa's administrative capital—that is, the seat of the executive branch of government—in 1910. Cape Town is South Africa's legislative capital, and Bloemfontein is the judicial capital. Pretoria lies in the province of Gauteng. For location, see **South Africa** (political map).

Many Pretoria residents hold government jobs. Others work in transportation, tourism, education, or trade, or in factories that make cement, chemicals, electronic equipment, machinery, motor vehicles, and plastics. The city is a cultural and research center. It has museums and art galleries, the national zoo, and three universities.

Settlers of European descent who are now called Afrikaners founded Pretoria in 1855. They were seeking independence from British colonial rule. When the Union of South Africa was formed in 1910, Pretoria became the administrative capital. After South Africa's *apartheid* (racial segregation) policy ended in the mid-1990's, Pretoria was merged with several formerly separate communities. In 2000, the Tshwane metropolitan municipality was formed, with Pretoria as its central city. Tshwane has 2,921,488 people. André Horn

Pretzel is a type of German biscuit. It is brittle and twisted, with a glazed, salted surface. According to tradition, the first pretzels were made in the early 600's by European monks as a reward for children who learned their prayers. The original pretzel's shape represented the crossed arms of a child praying. The first commercial pretzel bakery in the United States opened in Lititz, Pennsylvania, in 1861. Kay Franzen Jamieson

Prevailing westerly is a wind that blows over the north and south middle latitudes from west to east. In the Southern Hemisphere, prevailing westerlies over the ocean blow with such force that sailors call this region the "roaring forties." The winds are not steady because they are often interrupted by cyclonic storms. Over the land masses of the Northern Hemisphere, the westerlies are often turned from their course by moun-